Rhondda Urban District Council.

REPORT

OF

The Medical Officer of Health

FOR

THE YEAR 1912.

TONYPANDY:
Evans & Short, General Printers, Bookbinders and Stationers.

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RHONDDA URBAN DISTRICT.

Members of the Council.

COUNCILLOR THOMAS EVANS, J.P. (Chairman).
,, W. P. THOMAS (Vice-Chairman).
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,, D. R. JONES (3 months).
,, DAN DAVIES.
,, GRIFFITH EVANS.
,, ALFRED GLADSTONE TRIBE.
,, WILLIAM THOMAS JONES, J.P.
,, DAVID THOMAS (9 months).
,, EDWARD JONES (3 months).
,, WILLIAM LEWIS.
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,, WILLIAM EVANS THOMAS, M.D.
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,, JAMES JAMES.
,, WILLIAM SAMUEL LANE (9 months).
,, RHYS SAMUEL GRIFFITHS, J.P. (3 months).
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,, ABEL JACOB.
,, HENRY EDWARD MALTBY.
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,, WILLIAM LEWIS.
,, WILLIAM EVANS THOMAS, M.D.
,, WILLIAM SAMUEL LANE (9 months).
,, RHYS SAMUEL GRIFFITHS, J.P. (3 months).
,, MARK HARCOMBE.
,, EDGAR MORGAN (9 months).
,, LEMUEL PRICE GRIFFITHS (3 months).
,, WILLIAM THOMAS DAVIES.
,, EDWARD THOMAS WOOD.
,, HENRY EDWARD MALTBY.
,, THOMAS EVANS, J.P.

Officials of the Health Department.

Medical Officer of Health, Medical Superintendent of the Fever Hospitals, and School Medical Officer—

J. D. JENKINS, M.D., B.S. (Lond.), D.P.H., &c.

Assistant Medical Officer of Health and School Medical Inspector—

JOHN LAMBIE, M.D., D.P.H. (Glasg.).

School Medical Inspector—

J. W. GLENTON MYLER, F.R.C.S. (Eng.),
D.P.H. (Lond.).

Matron of the Fever Hospitals—

MISS ROSE E. SMITH.

Assistant Matron—

MISS MAY SHELTON.

Inspector of Nuisances—

* J. TOWY THOMAS.

Assistant Inspectors of Nuisances—

‖*GWILYM REED	...	No. 6 District
‖*JAMES WILLIAMS	...	No. 3 ,,
‖*DANIEL W. JONES	...	No. 4 ,,
‖*LEWIS T. DAVIES	...	No. 5 ,,
‖*DAVID JONES	...	No. 1 ,,
*DAVID J. OWEN	...	No. 2 ,,

*D. BOWEN DAVIES.
*EDGAR M. THOMAS.
*GWILYM GRIFFITHS.
*OWEN M. LEWIS.

Shops Inspectors—

‖*RICHARD THWAITES.
‖*THOMAS OSBORNE.

Health Visitors and School Nurses.

‡†MISS MADELEINE JOHN	...	No. 4 District
§MISS BLANCHE K. HOYLE	...	No. 3 ,,
†*MISS DAISY C. HUGHES	...	No. 1 ,,
§MISS E. GERTRUDE JENKINS	...	No. 2 ,,
§MISS MARGARET A. JONES	...	No. 5 ,,
§MISS MARGARET J. GOBERT	...	No. 6 ,,

Clerks—

T. J. REES.
A. O. MORGAN.
D. J. LEWIS.
C. G. DAVID.

In charge of Disinfector—

EDWARD TYSOE.
EDWIN HUDD.

* Holds the Sanitary Inspector's Certificate granted by the Royal Sanitary Institute.

† Holds the Health Visitor's Certificate granted by the Royal Sanitary Institute.

§ Holds the Midwives' Certificate granted by the Central Midwives Board.

‖ Holds the Meat Inspector's Certificate granted by the Royal Sanitary Institute.

‡ Holds the Sanitary Inspector's Certificate granted by the London Sanitary Inspectors' Board.

Telephone Numbers.

Medical Officer of Health—Office	...	39 Pentre
,, ,, Residence	...	47x Pentre
Fever Hospital ...	...	47 Pentre
Chief Inspector ...	...	17 Pentre
Inspector No. 1 District ...	...	3 Treorchy
,, 2 ,, ...	...	41 Pentre
,, 3 ,, ...	...	8 Tonypandy
,, 4 ,, ...	...	13 Tonypandy
,, 5 ,, ...	...	3 Porth
,, 6 ,, ...	...	2 Ferndale

RHONDDA URBAN DISTRICT.

Area	23,885 acres
Population (Census, 1911)	152,781
Population (estimate at Mid-Summer, 1912)	157,951
Rateable Value	£616,381
Birth-rate for 1912	33.1 per 1,000
Average Birth-rate for 10 previous years	37.9 ,, ,,
Crude Death-rate (from all causes) for 1912	13.8 ,, ,,
Corrected Death-rate (from all causes) for 1912	15.2 ,, ,,
Average Death-rate for 10 previous years	16.7 ,, ,,
Zymotic Death-rate for 1912	1.9 ,, ,,
Average Zymotic Death-rate for 10 previous years	2.7 ,, ,,
Death-rate from other forms of Tuberculosis for 1912	.66 ,, ,,
Average Death-rate from Pulmonary Tuberculosis for 10 previous years	.75 ,, ,,
Death-rate from other forms of Tuberculosis in 1912	.28 ,, ,,
Infantile Mortality for 1912	127 per 1,000 births
Average Infantile Mortality for 10 previous years	168 ,, ,,

Index to the Public Health Section of the Report.

PAGE

A.

Abatement of Nuisances 89, 90, 93-97, 153, 154
Accidents in Collieries 54, 149, 150
Act—Employment of Children's, 1903 100
,, Factory and Workshop, 1901 100-102
,, Food and Drugs 82
,, Housing, Town Planning, &c., 1909...79, 85, 87-97
,, Infectious Disease Notification 68
,, ,, ,, Prevention 68
,, Midwives 49
,, Notification of Births 33, 34, 68
,, Public Health Acts (Amendment) 68
,, R.U.D.C. (Tramways Extensions, &c), 1910...82, 83
,, Shops 80, 98, 99
Acts, Adoptive 68
Acute Poliomyelitis 45
Administration 79, 80
Area 6, 7
Assessable Value 107

B.

Bakehouses 101, 156
Baths, Pithead 25, 26
Berry, Mr. T. W. 27
Births 10, 11, 108, 111
,, Illegitimate 11-13, 110
,, in Wards 109
,, Notification of 33, 34
Birth-rates 10, 11, 20, 108, 111
,, Comparative 108
,, in Wards 109

PAGE

C.

Cambrian Colliery Co.'s Water Supply 77
Cellar-dwellings 85, 86
Census Enumeration (1911) 7-10
Cerebo-spinal Fever 45
Children's Act, Employment of, 1903 100
Classification of Diseases 159-162
Cleansing Station 71
Closet Accommodation 65
Colliery Fatalities 54, 149, 150
Common Lodging-houses 65, 66, 156
Cost of Scavenging 61, 62
Cowsheds 81, 156
Cule, Miss 37

D.

Dairies 81, 156
Dairies, Cowsheds and Milkshops Order, 1885 81
David, Mr. C. G. 80
Davies, Dr. Howard 37
Davies, Dr. J. P. H. 36
Deaths 13-15, 111, 159
,, Causes of 159
,, in age groups 15
,, in public institutions 13, 159
,, diseases causing most 15
,, uncertified 15, 16, 159
,, in Wards 112, 159
,, of children under one year of age,
18-34, 79, 111, 114, 161
Death-rates 13-15, 111, 150
,, comparative 13, 14
,, corrected 14, 157
,, in Great Towns 13-15, 113
,, in Wards 112
Density of Population 23

PAGE

Destructor, Refuse 60, 61, 71
Diarrhœa 46-49, 144
,, Mortality from 46-49, 144
,, Prevention of 47
,, Relation to Temperature and Rainfall... 46, 144
,, Vital Statistics relating to 48
Diet Cards 47, 48
Diphtheria 41-44, 130-136
,, Incidence of 42, 43, 134, 135
,, in County of Glamorgan 120, 121
,, Mortality from 42, 130, 131, 133
,, Notifications 41, 42, 130-135
,, Overcrowding in infected houses 43, 136
,, Secondary cases 42, 43
,, School incidence of 135
,, Ward distribution of 130, 132
,, Epidemic at Maerdy 42
Disinfection 70, 71
Disposal of Refuse 59-62
District Population 104, 105
District Rates 107
Domestic Insanitation 23
Drainage 62-65
,, of Appletree 64
,, ,, Bush Houses 64
,, ,, Caroline Street 64
Dwelling-houses, Plans of 151, 152

E.

Earth Temperature 144
Electric Power Distribution Co. 61
Employment of Children's Act, 1903 100
" Equifex " Disinfector 71
Erysipelas, Incidence of 120, 121
,, in County of Glamorgan 120, 121
Excrement disposal 65

PAGE

F.

Factory and Workshop Act 100-102
Feeding of Infants 31-33
Food and Drugs Acts 82
Food, Unsound, destroyed 68
Food Supplies, Milk and other 81, 82

G.

Great Towns 113

H.

Health Visitors 28-33, 47, 49, 79
Hospital (Penrhys) 59
,, (Tyntyla) 54-59
,, ,, Accommodation 54, 55
,, ,, Case mortality 55
,, ,, Expenditure 57, 58
,, ,, Maintenance rate 57
,, ,, Patients treated at 55, 158
,, ,, Ward contribution of patients ... 56
House Accommodation 83-87
Houses, Erection of, by Council 85
,, Closed 84, 94
,, occupied in Wards 112
,, passed for occupation 83, 84, 86
,, passed in Wards 86
,, unconnected 64
Housecraft School 27
Housing Regulations 85, 88
Housing, Town Planning, &c., Act 79, 85, 87-97

I.

Illegitimacy 11-13
Illegitimate births 11-13, 110
,, birth-rate corrected 12
Illegitimates, deaths of 12, 13
Incidence of Notifiable Infectious Diseases.....120-122, 158

PAGE

Infantile Mortality 18-34, 79, 111, 114, 161
,, ,, Causes of 19, 114, 115, 161
,, ,, compared with England & Wales 19
,, ,, Factors of 20
,, paralysis 45
Infants, Feeding of 31-33
Infectious Diseases, Incidence of 120-122, 158
,, ,, in County of Glamorgan ... 120, 121
Influenza 53, 54
Insanitation 23
Inspectors' work 153
Insurance Act, 1911 .... 51, 52
Inquests 54, 149
Introductory letter 1-3

J.

Joint Water Board 72, 77-79
Jones, Inspector D. W. 66
Jones, Mr. W. J. 85, 151, 152

L.

Lambie, Dr. John 59, 80
Lewis, Mr. D. J. 80
L.G.B. Tables 157-162
Llia Reservoir 79
Llynfawr Reservoir 74-76
Lodgers, Number of 129, 136, 142, 143
Lodging-houses, Common 65, 66, 156

M.

Measles 38, 39
,, in Wards 39
,, Mortality from 38, 39
,, School closure 38, 39
Meat Inspection 81, 82
Meteorology 144, 163-165
Midwives Act 49

PAGE

Milk and other Food Supplies 81, 82
Milkshops 81, 156
Milk Supply 81
Morgan, Mr. A. O. 80
Mortality, Infantile 18-34, 79, 111, 114, 161
,, ,, Causes of 19, 114, 115, 161
,, ,, compared with England and Wales 19
Myler, Dr. J. W. Glenton 80

N.

National Insurance Act 51, 52
Notifiable Infectious Diseases, Incidence of...120-122, 158
Notification of Births Act 33, 34, 68
Notifications 122, 158
,, Diphtheria 41, 42, 130-135, 158
,, Puerperal Fever 49, 145, 158
,, Pulmonary Tuberculosis 50, 158
,, Scarlet Fever 40, 123-128, 158
,, Typhoid Fever 44, 137, 158
Nuisances abated 89, 90, 93-97, 153, 154

O.

Offensive Trades 156
Osborne, Inspector T. 98
Overcrowding 23, 97
,, in infected houses, 41, 43, 45, 129, 136, 142, 143

P.

Penny Rate, Value of 107
Persons per house in infected houses....129, 136, 142, 143
Phillips, Dr. E. L. 38
Phthisis 50-53, 147, 148
,, Mortality from 50, 147
,, Notifications 50, 158
,, Relation to occupation 148
Pithead baths 25, 26

PAGE
Plans passed 87, 151, 152
Plumbo-solvency 74-76
Police Court Proceedings 69, 70, 99
Poliomyelitis, Acute 45
Pollution of Rivers 82, 83
Pontypridd and Rhondda Joint Water Board....72, 77-79
Pontypridd Registration District, Population of...... 106
Pontypridd Urban District Council 72
Pontypridd Waterworks Company 72
Population 7-10, 104-106
,, Administrative County 120
,, Density of 23
,, in Wards 105, 112
,, Pontypridd 106
Powell, Mr. William 16
Premises requiring periodical inspection 156
Puerperal Fever 49, 145
,, ,, Distribution of 145
,, ,, in County of Glamorgan 120, 121
,, ,, Mortality from 49, 146
,, ,, Notifications 49, 145
Pulmonary Tuberculosis 50-53, 147, 148, 158
,, ,, Notifications 50, 158

R.

Rainfall 144, 163-165
Rateable Value 107
Rees, Mr. T. J. 80
Refuse Destructor 60, 61, 71
Refuse Disposal 59-62
Regulations, Dairies, Cowsheds and Milkshops...... 81
,, Housing 85, 88
,, Tuberculosis 51
Reports presented 66, 67
River Pollution 82, 83
H.U.D.C. (Tramways Extensions, &c.) Act, 1910... 82, 83

PAGE

S.

Sanitary Defects remedied 96, 97
Sanitary Inspectors 79, 88, 90, 153, 154
Scarlet Fever 40, 41, 123-129
,, ,, Distribution of 41, 123, 124
,, ,, Incidence of 40, 41, 124
,, ,, in County of Glamorgan 120, 121
,, ,, Isolation of 40
,, ,, Mortality from 40, 125, 126
,, ,, Notifications 40, 123-128
,, ,, Overcrowding in infected houses....41, 129
,, ,, School incidence of 128
,, ,, Secondary cases 41, 124, 128
Scavenging 59-62
,, Cost of 61, 62
Sewerage 62-65
,, of Appletree 64
,, ,, Bush Houses 64
,, ,, Caroline Street 64
Shelton, Miss May 59
Shop Assistants 99
Shops in the District 99
Shops Act, 1912 .... 80, 98, 99
Shops Inspectors 80, 98
Slaughter-houses 82, 156
Small-pox 36, 37
,, Hospital (Penrhys) 59
Smith, Miss R. E. 59
Still-born Children 16-18, 21, 22
,, ,, Relation of, to Premature birth, 17, 18
Subsoil 6

T.

Temperature and Rainfall 144
Terrey, Mr. E. W. 78

PAGE

Thomas, Inspector J. Towy 66, 79, 88
Thomas, Mr. Octavius 73
Thomas, Dr. T. W. 37
Thomas, Dr. W. E. 36
Thwaites, Inspector R. 98
Topography 4-6
Tuberculosis 50-53, 79, 147, 148, 158
,, Prevention and Eradication of 51-53
,, Pulmonary 50-53, 147, 148, 158
,, Non-pulmonary 53
,, Regulations 51
Ty'nywaun Reservoir 73
Typhoid Fever 44, 45, 137-142
,, ,, Distribution of 45, 137, 141
,, ,, Epidemic at Cymmer 44, 45
,, ,, Incidence of 44, 139, 141
,, ,, in County of Glamorgan 120, 121
,, ,, Isolation of 44
,, ,, Mortality from 44, 139, 140
,, ,, Notifications 44, 137
,, ,, Overcrowding in infected houses... 45, 142
,, ,, Secondary cases 138

U.

Uncertified deaths 15, 16
Unconnected houses 63, 64
Unsound food destroyed 68
Urban conditions of life 22, 23

W.

Wards, Description of 7
Water, action on lead 74-76
,, Pump, Blaenclydach 73
,, Ram, Blaenycwm 73

PAGE

Water Supply ... 72-79
.. ,, Blaenclydach ... 73
,, ,, Blaenrhondda ... 76
,, ,, Blaenycwm ... 73
,, ,, Cambrian Colliery Co.'s ... 76, 77
,, ,, Clydach Vale ... 76, 77
,, ,, Council's ... 72-77
,, ,, Cwmparc ... 76
,, ,, Cymmer ... 77
,, ,, Fernhill ... 76
,, ,, Llia Reservoir ... 79
,, ,, Llwynypia ... 76
,, ,, Llynfawr Reservoir ... 74-76
,, ,, Penrhiwfer ... 77, 78
,, ,, Pontypridd and Rhondda Joint Water Board ... 77-79
,, ,, Trebanog ... 77
,, ,, Ystrad ... 76
Welsh National Memorial Association ... 52, 53
Whooping Cough ... 45, 46
Williams, Mr. George ... 47
Workshop Act, Factory and ... 100-102
Workshops and Workplaces in Sanitary Districts... 155
,, ,, ,, in Wards ... 102

Z.

Zymotic Deaths ... 34, 35, 116-119
,, ,, in Wards ... 118
,, Death-rate ... 34, 35, 116-118
,, ,, Comparison, England & Wales 34, 117
,, ,, in Great Towns ... 34, 117
,, ,, in Wards ... 35, 119
,, Diseases ... 34, 35, 116-119
,, ,, Definition of ... 34

Rhondda Urban District Council.

ANNUAL REPORT

OF

The Medical Officer of Health

FOR 1912.

To the Chairman and Members of the Rhondda Urban District Council.

Gentlemen,

In my capacity as your Medical Officer of Health, I beg to submit for your consideration my eleventh annual report upon the vital statistics and sanitary condition of the Rhondda Urban District during the year 1912.

The general (crude) death-rate from all causes in 1912, allowance being made for the transference of deaths to their respective districts, amounted to 13.8 per 1,000 of the living population, and is considerably the lowest ever recorded for the Rhondda, the nearest approach to this figure having belonged to 1910, which possessed a rate of 14.6 per 1,000. Attention should, however, be drawn to the circumstance that the relatively favourable rate for the year now under review was mainly due to the exceptionally low number of deaths from diarrhœa and other intestinal diseases of children under one year of age which occurred in the course of the year, and that this fact is doubtless largely attributable to the unusual meteorological conditions which characterised the summer and autumn, when the causes of death referred to are most destructive to infant life.

A more hopeful and reliable indication that a steady and material improvement is in progress is observable from a comparison between the death-rates for the last and the immediately preceding quinquennia; thus the average general death-rate for the last five years was 15.4, as compared with the average rate of 16.9 for the five previous years.

The number of problems which present themselves for solution and the array of unfavourable conditions which call for attention may seem somewhat overwhelming, but some of them have figured in the Medical Officer of Health's reports on numerous occasions. All of those previously included have, however, received consideration, and not a few of them have been satisfactorily dealt with in relation to present conditions and requirements. Among those still remaining, the following may be mentioned as most urgently requiring attention at the present time:—

(1) The exercise of every care, now that the Llyn Fawr Reservoir is practically completed, that the early availability of the water which will be collected therein will not be interfered with by failure to have in readiness other works which, although of lesser magnitude in themselves, may be equally necessary before the distribution of potable water to the consumer can be undertaken.

(2) The extension of the scope of the provisions now being made for the destruction of the house refuse of some portions of the district, so as to include the other areas,

especially that of Ferndale and its neighbourhood, where the conditions consequent upon the accumulations of refuse are fast becoming intolerable and a source of serious nuisance.

(3) The full utilisation of the powers conferred upon the Council in regard to the reduction of the prevalence of tuberculous diseases.

(4) The application of provisions contained in the Council's Acts to the control of the milk supply of the district, with special reference to its influence on the spread of infectious diseases.

(5) The consideration of the erection of municipal slaughterhouses in accordance with the powers conferred upon the Council by their Act of 1910.

(6) The acquisition, by acceptance or purchase, of plots of land, situated in localities at present unprovided for and suitable for purposes of recreation.

I am,

Yours faithfully,

J. D. JENKINS.

The Council Offices,
Rhondda.

TOPOGRAPHY.

The district, with an area of 23,885 acres, is about 12 miles long by about $4\frac{3}{4}$ miles across at its widest part. It is irregularly oval in shape, its greatest width lying between a point close to the junction of Mountain Ash, Aberdare, and Rhondda Urban Districts at Blaenllechau, and a point south-west of Gelli on the boundary between the Rhondda and the Ogmore and Garw Urban Districts. The district as a whole consists of two narrow, tortuous valleys, which gradually approach each other in their course southwards, and join at Porth, and thence the single valley so formed runs a short course before merging into the upper end of the Pontypridd Urban District at Trehafod. The two valleys, running at first at some distance from each other, together with the single valley formed by the junction of the other two, are so arranged that they resemble an irregularly-shaped Y. The stem of the Y is formed by the portion of the district extending from Trehafod to Porth and is over a mile long. The limbs, of unequal length, are formed by the Rhondda Fawr Valley, which is about $9\frac{1}{2}$ miles long, and by the Rhondda Fach Valley, which is of a length barely $6\frac{1}{2}$ miles. Both the valleys at their upper extremities end blindly, or form *cul-de-sacs*; their lateral boundaries are formed by steep hills, which vary in height from about 560 feet on either side of Trehafod, to 1,340 feet on the north-east of Maerdy, and 1,742 feet on the south-west of Treherbert. The Rhondda Fawr and the Rhondda Fach Valleys are separated by a steep ridge—Cefn Rhondda—which rises from a point 600 feet just above Porth to an elevation of 1,692 feet near the upper extremity of the district. The Rhondda River—formed at Porth by the junction of Rhondda Fach and Rhondda

Fawr Rivers—is 240 feet above sea-level at the lowest point in the district, at Trehafod, while the Rhondda Fawr River attains an elevation of 720 feet at Blaenrhondda and the Rhondda Fach River the still greater elevation of 920 feet at Maerdy. The highest point in the district is Carn Moesau, which is 1,950 feet high, and is situated at the upper end.

The valleys are very narrow, and allow in many places only sufficient space for river, road, and railway. Although the district is a large one, the area actually built upon is comparatively small, for the most suitable and convenient building ground is situated in more or less close proximity to the river. Here and there, however—as at Treorchy and Ton—the valleys open out a little, and it is mainly at these expansions that considerable numbers of houses have been erected. Leading out of the main valleys are a few side valleys, of which Cwmparc, Clydach Vale, and Cymmer are the most important.

It is interesting to note in connection with the topography of the district, the fact disclosed in the course of the year 1910 by a re-levelling of 176 bench-marks throughout the urban area by the Ordnance Survey Department, Southampton. The levels so obtained, when compared with those taken in the year 1898, or only 12 years previously, served to show that the whole district has sunk during that period, in many localities over five feet, the maximum difference recorded being 7.95 feet in Llwynypia. It is very noticeable that the subsidence has taken place very irregularly, the extent of the deviation from the 1898 records being often very unequal at adjacent bench-marks. Such irregular subsidence has an important bearing upon the stability and state of repair of all the buildings in the district as well as upon the maintenance of the continuity of all pipes such as sewers, drains, and water mains.

The prosperity of the district is entirely dependent upon its coal, which in its steam-raising properties, is reputed to be inferior to none.

In the census year 1901,—the details of the census taken in 1911 being not yet available,—32,625 males, or 69 per cent. of all males above ten years of age in the district, were returned as being engaged in "coal and shale mining." Upon this basis it is estimated that 45,806 males above ten years of age, or 29 per cent. of the total population, followed the same occupation in the year 1912.

THE SUBSOIL.

The coal-bearing strata are overlain by Pennant Sandstone, of which the large majority of the houses in the district are built. Scattered over the district are small areas of clay underlying peat, the latter being sufficiently abundant in some portions of the district to affect the colour and taste of the water. At the few expanded portions of the valleys the rivers are bounded by meadows whose soil is alluvial in character.

AREA.

The district has an area of 23,884.810 acres, and thus forms the most extensive Urban District in the County of Glamorgan, the next in size being Margam Urban District, with an area of 18,417 acres and a population of 14,713 at the last census. The Rhondda Urban District is, however, exceeded in area by seven out of the nine Rural Districts in the County.

For administrative purposes the whole of the Rhondda Urban District is divided into ten wards, the first comprising Treherbert at the upper end of Rhondda Fawr or the larger valley and the tenth including Ferndale and Maerdy at the corresponding end of Rhondda Fach or the lesser valley.

The respective wards comprise the undermentioned localities:—

Ward 1. Fernhill, Blaenrhondda, Blaenycwm, Tynewydd, Treherbert.
Ward 2. Cwmparc. Treorchy.
Ward 3. Pentre, Ton.
Ward 4. Gelli, Ystrad.
Ward 5. Llwynypia, Clydach Vale.
Ward 6. Tonypandy, Trealaw.
Ward 7. Penygraig, Williamstown, Edmundstown, Dinas.
Ward 8. Cymmer, Porth, Hafod.
Ward 9. Mount Pleasant, Tynewydd, Ynyshir, Wattstown, Pontygwaith. Stanleytown, Tylorstown.
Ward 10. Ferndale, Blaenllechau, Maerdy.

POPULATION.

Registrar-General's Estimate, 157,951.

The general census taken on the night of the 2nd of April, 1911, permitted the inclusion in the report for that year of a statement of the total extent of the increase in the population of the Rhondda Urban District since the date of the previous census taken in 1901. This increase during the last intercensal period (1901—1911) was found to have amounted to 39,063, equivalent to an addition of 34.3 per cent. to the population during that period; the corresponding rate of increase for the whole country was 10.9, the lowest on record.

The Rhondda rates for the two preceding intercensal periods were 58.8 and 28.7 per cent., the corresponding absolute additions to the population being 32,719 and 25,384, so that the increase during the intercensal period just expired was absolutely though not relatively the largest in the history of the district.

The number of families during the same interval increased from 21,619 to 29,428, the total difference thus being 7,809.

The great preponderance in the population of males over females whish marked the figures relating to the census also characterised the statistics of the 1911 enumeration, the excess in the case of the latter amounting to 13,637 males for the whole of the Rhondda. This difference is equivalent to the proportion of 1,000 males to 836 females or of 1,000 females to 1,196 males. This ratio is in marked contrast to the 1,068 females to 1,000 males found to exist throughout the country taken as a whole.

The rate of increase of a population is dependent upon two factors—(1) the balance between births and deaths, (2) the balance between emigration and immigration. In the Rhondda these two factors have been at work in producing the abnormally high increase in the population, for during a number of years the birth-rate has exceeded the death-rate to an unusual extent, and the industrial activity in the district during recent years has caused an influx of a large number of persons into the area. As in most instances the new arrivals are men seeking work, the great preponderance of males over females is thus accounted for.

The number of towns in England and Wales with populations of 50,000 or over and known statistically as the "great towns" was ascertained at the last census to have reached 97, among which the Rhondda occupies the 21st as compared with the 24th position which it filled among the 76 Great Towns during the previous intercensal period.

Much interest attaches to the increases recorded in the several wards during the intercensal period. The ward populations now range from 11,532 in the case of Ward 7 to 23,042 in the case of Ward 9, and the percentage rate of increase during the intercensal period has varied from 18.3 per cent. in Ward 10 to 73.7 per cent. in Ward 9. (See Appendix, Table 1a).

The earlier reports upon the census enumeration of 1911 do not provide detailed information concerning the houses and other buildings in any particular area, the basis of enumeration having been changed from "houses" to "separate occupiers." It is, however, promised that in later volumes additional information of buildings will be furnished. Moreover, in the case of "Families or Separate Occupiers," the term is made to comprise not only the numbers of private families, but also the numbers of public institutions such as hospitals, large private establishments such as schools, &c., so that it is impossible to obtain in a direct manner the number of private households or the average number of persons to each private family. By making due allowance, however, for the number of such institutions existing in a district as well as for the aggregate number of the persons accommodated therein, it is possible to arrive at a fair approximate average of the number of persons in each family (not house) in any particular district. In the case of the Rhondda such average is 5.16, as compared with 4.4 for England and Wales as a whole.

The Rhondda Urban District is contained within the Registration Sub-districts of Llanwonno, Llantrisant, and Rhondda, all of these being constituent portions of the Pontypridd Registration District, which also embraces Eglwysilan Sub-district. The several portions of the Rhondda Urban District within the three above-mentioned sub-districts contained, at the time of the 1911 census, 16,380, 15,625, and 120,776 persons respectively, the respective rates of increase which these populations denote being 33.7, 24.9 and 35.8 per cent. (Table 1b).

At the time of writing, a Preliminary Report and Volumes I. to IV., dealing with the statistics relating to the census taken on April 2nd, 1911, have been issued, but the volume bearing upon the various kinds of buildings and the population enumerated therein, and the seven volumes upon Social Statistics (age, civil state, occupation, &c.) have yet to make their appearance.

BIRTHS.

	1912.	Average for Ten Years 1902-1911.
Number of Births ...	5,236	5,109
Birth-rate in Rhondda ...	33.1	37.9
Birth-rate in 95 Great Towns...	24.9	27.5
Birth-rate in England & Wales	23.8	26.8

During the year 1912, 5,202 births were registered as having occurred within the Rhondda Urban District, and 34 births were registered outside the district which properly belong to the Rhondda, so that the total number of Rhondda births for the year amounted to 5,236. This total is lower by 255 than that for the previous year, and as the population increased by several thousands in 1912, the decline of the birth-rate was considerable. Thus in 1912 the birth-rate in the Rhondda was 33.1 per 1,000 of the population, whereas in 1911 the birth-rate amounted to 35.7 per 1,000, a decline of 2.6 per 1,000 having occurred. A reference to Table 3 in the Appendix will show that this rate is the lowest during the past 21 years.

The birth-rate recorded for 1912 is also less than the average of the birth-rates for the previous ten years by 4.8 per 1,000. A study of Table 3 leads one inevitably to the conclusion that the birth-rate for the Rhondda is steadily declining; but it is still much higher than that for the country as a whole as will be seen from the figures at the beginning of this section.

The "natural increase," or excess of births over deaths, in 1912 amounted to 3,054, and is less than the corresponding figure for 1911 by 85.

The numbers of births in the four successive quarters of the year were 1,378, 1,214, 1,311, and 1,299. In addition, 34 births occurred outside the district of children whose parents ordinarily reside within the district, and it is impossible to allocate these to their respective quarters of the year, as we have no information as to the dates of birth.

As a general rule, it is found that the births of males are in excess of the births of females, and this was the experience in 1912, 2,621 of the former having occurred as compared with 2,581 of the latter.

ILLEGITIMACY.

During the year 1912 there were registered 160 illegitimate births belonging to the district, the numbers for the five preceding years having been respectively 107, 119, 130, 121, and 136.

The number recorded in 1912 is equivalent to a rate of 1.0 per 1,000 of the population, or 31 per 1,000 births, the latter rate being higher by 6 than that for the previous year. The very substantial increase indicated by these figures is, however, more apparent than real, as a large number of transferred illegitimate births (31 out of a total of 34) which would not have figured in the statistical records of former years are in the total for this year. Had similar means been adopted on previous occasions, the illegitimacy-rates would have been considerably higher, and would probably equal if not exceed those pertaining to the year now under consideration. The rates above given as belonging to the Rhondda do not depart very materially from those relating to England and Wales, which were respectively 1.0 and 40.8 in 1910, the latest year for which the figures are available.

A much fairer way, however, of calculating the illegitimate birth-rate is to base the calculation on the proportion of unmarried and widowed women between the ages of 15 and 45 to the total population. In this district, this ratio was 7.5 per cent. at the census of 1901. Assuming the same proportion still to exist, the number of unmarried and widowed women of conceptive age in the district in 1912 amounted to 11,846. On this basis, the proportion of illegitimate births belonging to the district was 13.5 per 1,000 of such women. No comparison on these lines with the rest of the county is practicable, as the data since the adoption of the scheme of transferring the births to their respective districts are not yet available.

The infantile mortality-rate among illegitimate children is invariably found to be higher than the general infantile mortality-rate, and the figures relating to 1912 are no exception to the rule, when allowance is made for the transferred deaths as well as births. The attendant circumstances justify the conclusion that not fewer than five of the seven transferred deaths of infants under one were of illegitimate children, and the total of 24 deaths among these children thus attained were equivalent to an infantile mortality-rate of 150 per 1,000 of the illegitimate births, as compared with the rate of 127 for the legitimates alone.

DEATHS.

	1912.	Average for Ten Years 1902-1911.
Number	2,182	2,242
Rate per 1,000 in Rhondda ...	13.8	16.7
,, ,, 95 Great Towns ...	13.8	15.6
,, ,, England & Wales...	13.3	15.2

In the course of the year, 2,108 deaths were registered in the Rhondda Urban District. The number 2,182 given above is the number of deaths properly belonging to the district. To obtain it, the number of deaths of Rhondda residents which occurred outside the district is added to, and the number of deaths of non-residents which occurred within the district is deducted from, the total number of deaths registered in the Rhondda.

The Health Department is now supplied with lists of deaths of Rhondda residents occurring outside the district, by the Registrar-General through the County Medical Officer of Health. This information adds greatly to the accuracy of the vital statistics of the district. Of the deaths of residents which occurred outside the district, 22 occurred at Cardiff Infirmary, 24 at Bridgend Asylum, and 23 at Pontypridd Workhouse; 35 deaths also occurred at various other places in England and Wales, so that the total number of residents who died outside the district was 104, whereas the death of 30 persons not belonging to the Rhondda occurred within its limits. The nett number of deaths—2,182—is equivalent to a death-rate of 13.8 per 1,000 per annum. This rate is the lowest in the statistical records of the Rhondda, and an examination of Table 7 in the Appendix will show that the death-rate has been gradually falling with fair consistency throughout the whole period covered by the table.

A special factor in the causation of the low death-rate of the district in 1912 was, undoubtedly, the remarkably cold and wet summer, which was unfavourable to the development of diarrhœal diseases which have so frequently contributed a very large number of deaths to the annual total. The rate of 13.8 is the "crude" death-rate, and makes no allowance for the inequalities of age and sex distribution ascertained by the census enumeration to exist in this district, as compared with England and Wales as a whole. To eliminate this fallacy and to provide a fair basis for comparative statistics, the Registrar-General has provided each district with a "factor for correction." That for the Rhondda obtainable from the census figures of 1911 amounts to 1.1005, and if the "crude death-rate" of 13.8 per 1,000 be multiplied by this factor, the result obtained—15.2—is the "corrected death-rate" for the district.

An examination of Table 9 in the Appendix will show that the Rhondda occupies the 46th place amongst the 95 Great Towns in respect of its death-rate, that is to say, 45 of the 95 Great Towns had death-rates lower than that of the Rhondda in 1912. In this table the death-rate given for the Rhondda is that calculated from the Registrar-General's quarterly returns, and differs from the true death-rate owing to the fact that transfers of deaths of Rhondda residents in other districts have not been included. As the same reservation applies to the rates for other towns, the table is fairly applicable for comparative purposes.

The death-rate for the year in the Rhondda is identical with that for the 95 Great Towns taken as a whole, but exceeds that for England and Wales by .5 per 1,000. The causes of death which contributed most largely to the death-rate of the district were pneumonia (all forms), bronchitis, heart disease, debility, measles, malignant disease, violence and phthisis, with the respective totals of 288, 210, 175, 133, 127, 107, 106, and 105. (Table III. in the Appendix).

The number and percentage proportion of the deaths divided into their respective age groups which occurred in the Rhondda during the year are as follow:—

666, or 30 per cent., under 1 year of age.
195, or 9 per cent., over 1 and under 2 years.
157, or 7 per cent., over 2 and under 5 years.
98, or 5 per cent., over 5 and under 15 years.
110, or 5 per cent., over 15 and under 25 years.
291, or 13 per cent., over 25 and under 45 years.
394, or 18 per cent., over 45 and under 65 years.
271, or 13 per cent., over 65 years.

UNCERTIFIED DEATHS.

Of the 2,108 deaths which were registered within the Rhondda Urban District during the year, 1,957 were certified by registered medical practitioners. the district Coroners held inquests on 142, and the remaining 9 were uncertified by either Coroner or Medical Attendant.

The respective proportions of the certified deaths, inquest cases, and uncertified deaths to the total number of deaths were 92.9, 6.7, and .4 per cent.

In the case of the uncertified deaths the causes of death assigned were as follow:—

Debility and Inanition	3
Convulsions	2
Epilepsy	1
Gastritis	1
Premature Birth	1
Injury at Birth	1
	9

STILL-BORN CHILDREN.

I am indebted to Mr. William Powell, the Clerk to the Burial Board, for a record of the number of still-born children brought to the three cemeteries for burial during the years 1897-1912.

Year.	No. of Still-born Children recorded.	No. of Births Registered.	Rate per 1,000 Births.	Average for 8 year periods.
1897	229	4,109	55.7	6 45
1898	210	4,120	50.9	
1899	271	4,089	66.3	
1900	312	4,469	69.6	
1901	348	4,586	75.9	
1902	333	4,937	67.5	
1903	333	4,897	68.0	
1904	301	4,860	61.9	

1905	367	4,664	78.7	63·1
1906	323	4,751	67.9	
1907	346	4,831	71.6	
1908	354	5,454	64.9	
1909	337	5,577	60.4	
1910	321	5,628	57.0	
1911	292	5,491	53.2	
1912	**268**	**5,236**	**51.2**	

The statistics relating to the country as a whole which are periodically issued by the Registrar-General, show that the mortality rate for premature birth has increased considerably since 1886. An explanation of this fact which has been given is to the effect that, owing to increased accuracy in death certification, deaths which would formerly have been included among the still-births are now certified as due to premature birth.

For many previous years, the available local statistics upon this subject did not support this contention; but as may be seen by an analysis of the two tables given in this section, the equal division of the time covered by the figures into two eight-yearly periods lends colour to the suggestion, for the ratio of the number of still-births to the total number of births registered has fallen from 64.5 per 1,000 in the first to 63.1 per 1,000 in the second period, whereas the corresponding proportions in the table of premature births have increased from 14.6 to 15.2 per 1,000. If all the years except 1912, for which the statistics are available, be divided into three quinquennia, the result favours the contention referred to in the first and third periods, but is opposed in the second period. If 1912 be considered unassociated with previous years, strong support is lent to the opinion, there being a considerable diminution in the number of still-births recorded and an appreciable relative increase in the number of premature births.

Year.	Deaths from Premature Birth	No of Births Registered.	Rate per 1,000 Births.	Average for 8 year periods.
1897	72	4,109	17.5	14.6
1898	53	4,120	12.8	
1899	56	4,089	13.6	
1900	66	4,469	14.7	
1901	74	4,586	16.1	
1902	53	4,937	10.7	
1903	84	4,897	17.1	
1904	69	4,860	14.1	
1905	62	4,664	13.3	15.2
1906	69	4,751	14.5	
1907	68	4,831	14.1	
1908	88	5,454	16.1	
1909	93	5,577	16.7	
1910	85	5,628	15.1	
1911	85	5,491	15.5	
1912	**87**	**5,236**	**16.6**	

INFANTILE MORTALITY.

	1912.	Average for Ten Years. 1902-1911.
Rhondda per 1,000 births	127	168
95 Great Towns	101	
England and Wales	95	

By the term Infantile Moritality is meant the proportion which the number of deaths of infants under one year of age bears to the number of births during a specified period.

A total number of 666 children under one year of age died throughout the Rhondda in the course of 1912, whereas the total number of births belonging to the district amounted to 5,236, the infantile mortality for that year resulting from these two data being 127. These figures are so unusual as to evoke special comment. On the one hand, the number of births is the lowest recorded since 1907; on the other hand, the number of deaths of children under one is the lowest for at least 22 years, the nearest approach to this year's total being that pertaining to 1909. As, however, the reduction is relatively greater in the case of the deaths, it follows that the infantile mortality for 1912 is the lowest recorded during the last 22 years, and is no less than 41 lower than the average annual rate for the district for the ten previous years, although still 32 above the rate for the whole of England and Wales for the year 1912. Although the actual reduction experienced is in itself a matter for satisfaction, it must be added that the meteorological conditions of the year were exceptionally unfavourable to the occurrence of diarrhœa and other intestinal diseases which are usually such fruitful causes of fatal illnesses in young children during the summer and autumn months in years when much heat is experienced.

Of the 666 deaths of infants which occurred throughout the district in the course of the year, only 64 were attributed to diarrhœa, gastritis, and enteritis, whereas usually the number ascribable to these causes combined amounts to hundreds each year. On the other hand, the chest diseases bronchitis and pneumonia were responsible for 75 and 106 deaths respectively (Table IV.), the contributions from both these causes being above the average.

Very many factors influence the rate of infantile mortality in every district, but the influence of the individual factors varies in degree in different localities and may be most active in its operation before, at, or after birth.

Among the most important are usually considered to be the industrial employment of married women and poverty, but in the Rhondda exceedingly few of the mothers are under the necessity or have the opportunity to supplement the earnings of their men-folk by themselves labouring in factories or workshops in the district, and work in connection with the collieries provides relatively well-paid employment for all those who are able and willing to take advantage of the demand for labour.

Among the most potent factors operating prejudicially to the preservation of infant life in this district may be mentioned:—

(1) The abnormally high birth-rate or the size of the family.
(2) The number of still-births.
(3) The age of the mother at marriage.
(4) Urban conditions of life.
(5) Domestic insanitation.
(6) The housing conditions.
(7) Ignorance and carelessness of mothers.

Each of these is of sufficient importance to receive some special consideration.

(1) HIGH BIRTH-RATE. The birth-rate in the district has exceeded the average annual rate for England and Wales for many years, the extent of such excess amounting to 11 births per 1,000 of the population during the last ten years; in fact, during most of those years, the Rhondda has possessed the highest birth-rate among the large towns. The belief that a high birth-rate tends to the production of a high infantile mortality is general, but there are many and striking instances in the vital

statistics of the country which support the opposite view, and certain considerations of a general character tend to the same conclusion. Thus it is well known that the death-rate among the first-born is higher than among those subsequently born, and large families would therefore serve to reduce the infantile mortality owing to the relatively fewer number that are exposed to the additional risks run by the first-born. It is also reasonable to conclude that each successive birth finds the mother more experienced in the rearing of children than on the previous occasions, to the advantage of the younger members of the family. On the other hand, large families and high birth-rates are associated with early marriages with their attendant circumstances of thoughtlessness, ignorance of mother-craft, and a want of a due appreciation of the duties and responsibilities of motherhood. The age at marriage is unusually early in the Rhondda, the relatively good wages earned by very young men tending in a marked degree to the assumption of responsibilities not usually undertaken until a more mature age has been reached. Moreover, with the very limited assistance usually available in the performance of domestic duties, it is obvious that the amount of time and attention which can be devoted to each child is less in the case of the larger families, and the baby consequently suffers in common with the others. Again, the periods of exhaustion necessarily associated with child-bearing serve, when oft-repeated, to make the mother less able to bear the strain of each successive pregnancy to the disadvantage of the child before, during, and after birth.

(2) The number of still-births. In the section of this report dealing with still-births a table is given to show that a diminution has taken place in the number of still-born children taken for burial to the three ceme-

teries in the district since 1906, the number for 1912 being the lowest, absolutely and relatively, recorded since 1899. On the other hand, a slight increase has taken place in the proportion of the deaths from premature birth during the same year. With the statistics at present available, however, the final conclusion that the number of deaths recorded from premature birth has increased at the expense of the number of recorded still-births owing to more accurate certification with a corresponding increase in the infantile death-rate is not justifiable, the contrary indication being supported by the statistics relating to a number of the years during the last decennium.

(3) THE AGE OF THE MOTHER AT MARRIAGE. As previously mentioned, the age at marriage is exceptionally low in the district, and it is a recognised fact that the proportion of weakly children borne by young mothers is higher than in the case of women of more mature age. The older women have also had, before marriage, more time and opportunities to acquire knowledge of a kind likely to prove helpful to them in the rearing of infants and in general household management to the consequent advantages of their children.

(4) URBAN CONDITIONS OF LIFE. Speaking generally, urban populations possess higher infantile mortality-rates than do rural communities, but many individual exceptions may be quoted to prove that density of population on space is not in itself an all-important factor in the causation of the higher rates which usually characterise urban populations. In the Rhondda, the distribution of the population is somewhat irregular owing to the comparatively limited amount of available ground which is suitable for building purposes, and which is restricted to a small area in close proximity to the main roads, tram-

ways, and railways which run along the bottom of the valleys, the high and steep hills intervening between the valleys being avoided, for obvious reasons, by both owners and occupiers. Even in the most populous centres the density of population does not approach in its extent that existing in most of our large towns. Although full use of the available land permitted by the building bye-laws is usually made, there are so many gaps in the series of streets or aggregations of houses owing to the occurrence of unsuitable ground, that over-building on space is difficult of accomplishment on any but comparatively small areas. If the urban district be considered in this relation as a whole, the density of population amounts to 7 persons per acre, or less than one-ninth that of London, also taken as one uniformly-populated unit.

(5) DOMESTIC INSANITATION AND OVERCROWDING. Among the most potent of the unfavourable influences in this district are domestic insanitation, and to a less extent, overcrowding, not of houses on space, but of individuals in houses. Detailed information concerning the extent of domestic overcrowding existing here and elsewhere at the time of the census taken in 1911 is not yet available, but at the enumeration made in 1901 it was ascertained that the County of Glamorgan was favourably circumstanced as compared with most other districts of the kind, such as Durham, Northumberland, and Yorkshire, with regard to the relatively small proportion of the dwellings which contained fewer than five rooms as well as of persons who were living more than two in one room. The Rhondda, in comparison with the rest of Glamorgan, was somewhat better off in respect of the former factor, but showed, on the contrary, a slightly higher average number of persons per house than the remainder of the geographical county.

With regard to the state of sanitation in and around the dwelling-house, much improvement is possible as well as desirable in a considerable proportion of the habitations throughout the district. This form of insanitation, when existing, is caused by a number of circumstances which vary in the extent to which they operate in particular instances. Although there is but little poverty as usually understood in the district, it is only a small proportion of the population that can afford to employ or do employ domestic servants; consequently the housewives of the district are generally much occupied with, if not harassed by, their domestic duties, especially when such include provision for a large family, consisting of the husband, a number of children, and possibly one or more boarding lodgers; in such cases the men at work are not infrequently engaged at different hours, and therefore require their meals and baths at different times of day.

A considerable number of the population also have been brought up under rural conditions, and, on their migration to an urban district, fail to conform to the habits of urban communities, with the result that practices which, though unavoidable and innocuous in rural districts, help to produce highly undesirable environmental conditions in populous centres. As an example may be mentioned the disposal of house refuse; the tendency to deposit waste of all kinds in the back yard or in the nearest lane is very marked and difficult to eradicate in many of the inhabitants of the district. The unformed and uneven condition of many of our roads and of the large majority of our back lanes materially conduces to the perpetuation of this practice, notwithstanding the fact that a daily collection of house-refuse is undertaken by the Council. Owing to the general system of drainage and sewerage carried out throughout the district, the most objectionable form of refuse does not contribute towards the insanitary surroundings which are found to exist in not a few of our localities, and which are largely caused as above indicated. The state of many of the lanes and even of some of the front streets is such as to render many of the houses abutting upon them inaccessible except through slush or filth inches deep. Under such circumstances it is a common practice on the part of the occupants to try to improve the conditions by throwing house-refuse into the wet hollows, the remedy being generally worse than the defects which it is intended to abate, for the mixture of mud and refuse produces a nuisance of a still more objectionable character. With surroundings of such a kind, it is often impossible to gain access to the houses without conveying on person and clothing much unclean, foul-smelling, and often germ-laden material which serves to contaminate the food, the air, and the immediate surroundings generally. The baby (if any), being capable of least resistance to these unfavourable influences as well as the most dependent upon food exceptionally susceptible of contamination, is usually the member of the household to suffer first and most seriously. The mother also, being always exposed to these conditions and without respite or relief, is apt not only to suffer in health, but also to quickly lose any pride which she may have in the maintenance of a clean home and which she may spasmodically display when circumstances permit before she finally becomes too dispirited to make any effort to introduce and to maintain order, method, and a state of wholesomeness in and around her home.

No definite action has yet been taken towards the establishment of baths at the pit-heads in the district so as to enable the workmen engaged at the collieries to reach their homes in a clean condition. It is now but natural for the collier, with his own person and clothing carrying much coal-dust, to be less fastidious in his requirements as to the state of his home, whereas if he were in a position to bathe and change before leaving the colliery premises a higher standard of cleanliness in the home would be more likely to be required and more easily attained. The house-wife also, in consequence of the reduction in her daily duties which the establishment of pit-head baths would occasion, could more easily raise her standard of domestic sanitation.

(6) WANT OF KNOWLEDGE AND CARELESSNESS ON THE PART OF MOTHERS. Of all the evil influences at work in the causation of the high infantile mortality which has characterised the history of the district for many years, one of the most fruitful in its unfortunate results is that due to the tenacity shown by mothers in clinging to customs which are inimical to the welfare of their children but in spite of which a large proportion of the children survive. Doubtless their adherence to such of those customs as are condemnable is to some extent due to the tendency to take the line of least resistance, the acquisition and application of fresh knowledge involving the expenditure of time and energy of which they may have but little to spare for reasons already given. Moreover, many mothers, especially the older ones, often proffer, with the temerity of ignorance, much harmful advice to the younger ones, and thus serve to nullify the more enlightened information given by the Health Visitors. If under those circumstances a young mother ignores the precepts given by the members of an older generation among her neighbours, she is not infrequently subjected to much unwelcome attention sometimes amounting to persecution, to withstand which requires a great deal of

courage and faith in the newer and more enlightened doctrines.

One of the means now being utilised in the district for imparting accurate information bearing upon this subject is the establishment of house-craft schools, of which one has been opened at Pentre under the charge of Miss Helen Norris. There is much good work being done at this school under the general direction and guidance of Mr. T. W. Berry, Director of Education. The older girls in each elementary school in the neighbourhood are given a course of training in the principles and, to all the extent possible, in the practice of mother-craft, housewifery and laundry work. The girls themselves have to do the shopping required, and they follow the various processes undergone by each article from its purchase until it appears as the final product, whether for the table or for wear. The girls are said to show much eagerness to learn the subjects taught, and it is hoped that the knowledge acquired by them will not evaporate during the time intervening between the end of their school life and their assumption of matrimonial responsibilities. This period, however, is usually spent in the cultivation of arts of a still more interesting character to girls of this age to the probable exclusion of others and the consequent forgetfulness of the importance of not only retaining, but also augmenting the knowledge previously acquired. The practice at their homes of the application of this knowledge is of great importance in fitting girls to bear their future responsibilities, and it is obvious that the welfare of future generations will depend to no small degree upon these responsibilities and the manner in which they will be met. It is also hoped that the problem of bridging over the gap between the termination of the elementary school life of girls and their assumption of the responsibilities of managing homes of their own will be given further serious attention in regard to the continuity and extension of the education available to the children in their early life.

The consideration given by the Council in recent years to the measures best capable of application in this district to the reduction of the infantile death-rate led during the year now under review to the appointment of four Health Visitors in addition to the two already in the service of the Council. These additions enabled the Council not only to extend to the whole urban area the ministrations of the Health Visitors, hitherto limited to about three-fifths of the district, but also, by arrangement with the Education Committee, to include in the duties performed those usually allotted to School Nurses.

In the subjoined table is given an analytical summary of the results in relation to infantile mortality, distinction being drawn between the localities which received the attention of Health Visitors throughout the whole year and those which had no such attention until the newly-appointed Health Visitors took up their duties in June.

	No. of Births.	No. of Deaths under One Year of Age.	Rate per 1 000 Births.
Health Visitor's District No. 1. (Wards 1, 2 and 3)	1,382	161	116
Health Visitor's District No. 2. (Wards 6, 7 and 8)	1,467	164	112
Both Districts Combined. (Wards 1, 2, 3, 6, 7 and 8)	2,849	325	114
Rest of Rhondda. (Wards 4, 5, 9 and 10)	2,387	341	143

It will be noticed that the difference between the infantile death-rates in the two areas is very considerable, —29 per 1,000 births,—but owing to marked local fluctuations in small areas noticeable from year to year

Table giving in detail the information obtained by the six Health Visitors concerning deaths of children under one and of children born dead.

		Deaths of Children under one.		Still Births.	
		Total Number.	Per Cent of Total Cases.	Total Number.	Per Cent of Total Cases.
Sex	Male	240	53	107	59
	Female	209	47	74	41
Ages at Death.	0 to 12 hours ..	35	8		
	12 to 24 ,, ..	6	1		
	1 to 7 days ..	49	11		
	1 to 4 weeks ..	66	15		
	1 to 2 months ..	44	10		
	2 to 3 ,, ..	34	8		
	3 to 4 ,, ..	34	8		
	4 to 5 ,, ..	18	4		
	5 to 6 ,, ..	19	4		
	6 to 7 ,, ..	23	5		
	7 to 8 ,, ..	21	5		
	8 to 9 ,, ..	24	5		
	9 to 10 ,, ..	26	6		
	0 to 11 ,, ..	25	5		
	1 to 12 ,, ..	25	5		
Maturity	Mature . ..	346	77	95	52
	Premature	103	23	86	48
	Insured	170	38		
	Not well from birth ..	169	38		
Previously visited by Health Visitor		191	43		
	Separated from mother..	3	1		
	Breast-fed	210	47		
	Partly breast and partly otherwise ..	36	8		
	Bottle-fed	133	30		
	Spoon-fed	14	3		
	Unfed	56	12		
Milk	Cows	54	12		
	Condensed	81	18		
	Patent Foods	12	3		
Abnormal number of flies in house					
	Insanitary condition of house	12	3		
	Overcrowding	4	1	4	2
Previous deaths					
	1 child under one year of age	102	23	35	19
	2 children ,, ,, ,,	29	6	11	6
	3 children ,, ,, ,,	13	3	3	2
	4 or more children ,,	11	2	6	3
Total number with previous deaths of Infants under one .		155	34	55	31
Number with 1 previous still-birth		35	8	33	18
,, ,, 2 ,, still-births		9	2	8	4
,, ,, 3 ,, ,,		2	1	8	4
,, ,, 4 or more ,,		4	1	6	3
Total number with previous still-births		50	12	55	31
Abnormal condition of mother ..		91	20	64	35
Difficult birth		77	17	86	48
Illegitimate		12	3	5	3

and possibly attributable to other factors, it is unsafe to draw any general conclusions from observations covering such a limited period. It may be added, however, that these figures support the inferences of a similar kind which one felt justified in making when considering the statistics of previous years in relation to the apparent influence of the work done by the Health Visitors in reducing the infantile death-rate in the district.

The circumstances—ante-natal, natal, and post-natal—relating to the infants who died before reaching the age of one year were investigated, and a summary of the information so obtained is recorded in the above table. The figures are in the main self-explanatory and serve to indicate the directions which our efforts at reduction should take, but special attention may be drawn to a few of them.

In 258, or 57 per cent., of the total number of deaths, the Health Visitors had no opportunity to exert any influence, in a direct manner, upon the child's well-being owing to its death before their visit to the house.

Information concerning 149 deaths of children under one and to 181 still-births was obtained throughout the year. In the case of the former, 41, or 9 per cent., occurred within 24 hours of birth, and 90, or 20 per cent., within the first week; 103, or 23 per cent., were prematurely born; 170, or 38 per cent., were insured; 169, or 38 per cent., were ailing from birth; 210, or 47 per cent., were entirely breast-fed; 36, or 8 per cent., were partly breast-fed and partly artificially fed; 147, or 33 per cent., were artificially fed, and no fewer than 56, or 12 per cent., were reported as having been incapable of being fed at all.

As observed in the statistics belonging to previous years, it was found that a large proportion of the mothers had previously experienced similar losses of infants under one. In 155, or 34 per cent., of the cases, such previous losses had occurred.

A considerable proportion of the mothers also—12 per cent.—had previously given birth to still-born children. In 91 cases, or 20 per cent., the mothers were said to have been in an abnormal state of health at or prior to the birth, and in 77, or 17 per cent., an unusually difficult labour was reported.

The subjoined Table serves to compare the statistics relating to the naturally fed and artificially fed infants in regard to the methods of feeding and foods used, distinction being made between those who survived and those who died before attaining one year.

Children who survived.				Children who died.	
		Totals.	Percentages.	Totals.	Percentages.
Breast-fed		3,134	85	210	47
Partly breast-fed		58	2	36	8
Bottle-fed		491	13	133	30
Spoon-fed		11	—	14	3
Unfed		—	—	56	12
Bottle Used	Boat-shaped.. ...	281	51	35	51
	Tube	256	47	33	48
	Boat-shaped and tube	12	2	1	1
Milk Used	Cow's	174	33	54	40
	Condensed	353	66	81	60
	Dried	6	1	—	—
Patent foods used		27	—	12	—

In comparing the information relating to the 181 still-births with that pertaining to the children born alive, the most notable features are the extent to which the proportions in the former exceed those in the latter with regard to the number of male children, prematurity at birth, previous occurrence of still-births, abnormal state of health of the mother, and difficult labour.

One of the most striking facts brought out by the table is the much higher proportion of breast-fed babies among the survivals than among those who died before reaching one year of age, the figures being 85 and 47 respectively, and, per contra, of the relatively large number of artificially fed babies among those who succumbed.

It should be added, however, that it would be straining the evidence to say that the high mortality among the artificially fed is due entirely to the fact that they were fed by hand, and thus exposed to the additional risks attendant upon that method of feeding; some of them were doubtless so brought up on account of their failure from inherent weakness or some disease to take their nourishment in the natural manner, and would probably have succumbed were the mode of feeding adopted free from all the risks dependent upon the method. The difference is, however, so great and so generally the experience that one is justified in concluding that the relationship between artificial feeding as usually practised and a high infantile mortality is causal and so pronounced that it may be justly said that every mother who deliberately chooses the artificial method of feeding when she has the opportunity of adopting the more natural one is failing to consider and to give due weight to the best interests of her child.

The comparison between the apparent results of the kinds of bottles used in the two groups provides no data favourable to either the tube or boat-shaped bottle. It is to be remembered that the year under review was exceptional in regard to the unfavourable conditions which it presented to the occurrence of summer diarrhœa, which, in more normal years, is a more common cause of the deaths of infants and whose production is largely dependent upon the carelessness or ignorance shown in the choice and administration of the food given to infants. In 1912, the infantile death-rate was less influenced than usual by considerations of diet.

All recent investigations, including those carried out on behalf of the Local Government Board, support conclusions made as a result of many other previous inquiries and experiments as to the extreme importance of giving every child the opportunity of receiving its nourishment during the first few months of its existence from its mother's breast. The infant is thus provided, not only with the form of food most suitable to its condition and powers of assimilation, but also with milk which has had to undergo none of the risks and changes attendant upon their collection, distribution, and preparation which the various substitutes have to experience before their administration to the child.

The Notification of Births Act, 1907, was adopted by the Council and came into force on the 28th of April, 1909.

Since that date considerable difference has existed in the degree to which the provisions of the Act have been complied with by those subject to its requirements in various parts of the district, the thoroughness with which its demands have been met being dependent upon whether any particular locality was at the time receiving the supervision of a Health Visitor.

Table showing the extent to which the Notification of Births Act, 1907, has been complied with since its adoption in 1909.

		Births registered with District Registrars.	Births notified to Medical Officer of Health.	Percentage proportion of latter to former.
Health Visitors' District.	1909(½)	1,550	1,546	100
	1910	3,079	3,023	98
	1911	3,059	3,144	103
	1912	—	—	—
Rest of Rhondda.	1909(½)	1,237	1,050	85
	1910	2,549	1,236	48
	1911	2,404	1,670	69
	1912	—	—	—
Whole of Rhondda.	1909(½)	2,787	2,596	93
	1910	5,628	4,259	76
	1911	5,463	4,814	88
	1912	5,202	4,898	94

ZYMOTIC DISEASES.

	1912.	Average for Ten Years. 1902-1911.
Total number of deaths in Rhondda from Zymotic Diseases	300 ...	366
Zymotic Death-rate for Rhondda ...	1.9 ...	2.7
,, ,, 95 Great Towns...	...	
,, ,, England & Wales	...	1.5

Under the term "Zymotic Diseases" are grouped the following:—Small-pox, measles, scarlet fever, diphtheria, whooping cough, typhoid and other continued fevers, and diarrhœa. The term in the light of modern knowledge has become a somewhat unscientific one, and statistics relating to the group of zymotic diseases as a collective whole are not now issued by the Registrar-General for comparison. The zymotic death-rate, however, is a useful index of the success or failure of preventive sanitary methods in a district, provided due allowance be made for exceptional circumstances, and as such the group has been retained in this report, but certain of the comparative statistics have of necessity been omitted.

The principal cause of variation in the zymotic death-rate of the Rhondda is the fluctuation in the prevalence of diarrhœa, which in turn depends mainly upon the climatic conditions prevailing during the summer and autumn months.

Last summer having been remarkably cold and wet, the zymotic death-rate was comparatively low, and would have been still lower but for the excessive prevalence of measles, which, not being a notifiable disease, cannot be said to come, to the same extent, under the influence of preventive sanitary measures.

The zymotic death-rate for 1912 in the Rhondda was 1.9 per 1,000, this rate being .8 per 1,000 lower than the average of the similar rates for the ten previous years.

A consideration of Table 12 in the Appendix, subject to a recognition of the influence of exceptional conditions, meteorological or other, in the years of excessive zymotic death-rates, will show that the general tendency has been towards improvement, especially in recent years.

Wards 1 and 6, each with a zymotic death-rate of 1.1 per 1,000, showed the lowest zymotic death-rates in the district, and Ward 10 the highest—2.8 per 1,000 persons living. (Table 15).

SMALL-POX.

In the course of the month of November, a case presenting many of the features of small-pox occurred within our district. In the evening of Saturday, the 9th of November, 1912, I was asked by Dr. J. P. H. Davies, acting on behalf of Dr. W. E. Thomas, to see the patient, who was lying ill at the Infirmary attached to the Llwynypia Homes. The man (M. B.) was a labourer, 34 years of age, and had been removed on the 5th of November from the Pontypridd Workhouse as a case of pulmonary tuberculosis, complicated by severe heart disease. When seen late on the 9th, there was a well-marked eruption on the face and upper limbs, and the patient had been isolated in a small ward. Early on the morning of the 10th I again saw the patient, and after consultation with the Medical Officer, made arrangements to remove the man forthwith to the Council's Penrhys Hospital, at which the necessary preliminary steps had been taken overnight. The patient seemed to improve slightly for some 12 days after removal, but subsequently got worse and died on Saturday, the 23rd of November, his cardiac condition being mainly responsible for the fatal result.

Precautionary measures. After the removal of the patient to the Penrhys Hospital, further and more complete measures were taken to prevent the spread of the disease. The early re-vaccination of 30 persons who were believed or ascertained to have come in contact with the patient was undertaken by Dr. W. E. Thomas. All the bedclothes and bedding belonging to the two wards last occupied by the patient, together with selected articles from another ward, were disinfected by superheated steam at the Tyntyla Isolation Hospital. The wards deemed to have been infected were disinfected by means of formaldehyde gas and perchloride of mercury solution under the immediate supervision of Inspector James Williams, with the assistance of members of the Infirmary Staff placed at our disposal by Miss Cule, the Superintendent Nurse, and Mr. Lewis, the Master.

The Pontypridd Guardians arranged to curtail as far as possible all communication with the Llwynypia Infirmary, and the admission and discharge of patients were reduced to the narrowest possible limits.

During the time the patient was accommodated at the Penrhys Hospital, a strict limitation was placed upon the intercommunication of its staff with the outside world, all necessaries and other requirements being supplied from the Tyntyla Hospital.

Detailed inquiries were made by your Medical Officer at Pontypridd Workhouse, and at Caerphilly, where the man had worked before his admission to Pontypridd Workhouse, with the view of finding a source of infection. Dr. Howard Davies, Medical Officer to Pontypridd Workhouse, and Dr. T. W. Thomas, Medical Officer of Health for Caerphilly, gave every assistance in these inquiries, but no fresh light was thrown upon the origin and nature of the illness.

The case, with its attendant circumstances, illustrates the advantage to the district of possessing a small-pox hospital equipped and ready to receive at short notice any case of small-pox which may occur.

Although the case presented certain unusual features whose existence made it impossible to pronounce it to be one of unequivocal small-pox, the continuance of its isolation and treatment at the Llwynypia Union Infirmary would have been unjustifiable and attended by a considerable amount of risk.

MEASLES.

	1912.	Average for Ten Years. 1902-1911.
Number of Deaths	127 ...	71
Death-rate per 1,000, Rhondda ...	.80 ...	.53
,, ,, 95 Great Towns ...	.47 ...	
,, ,, England & Wales	.35 ...	.31

As in the previous year, this disease was exceptionally prevalent in the district, as a death-roll of 127 bears witness. This total for the year, however, is less than that for 1911 by 17, and the mortality-rate for 1912 is less by .14 per 1,000 than that for 1911.

Measles is not a notifiable disease, and, therefore, the control over its spread exercised by the Health Department is but limited. One means available to check the spread of measles is through the closure of schools, and that measure has proved of doubtful efficacy in urban areas. For the purpose of securing the preventive advantages of the exclusion from school of groups or classes of children, without at the same time depriving the pupils of the educational facilities afforded at the schools, other methods were adopted in the course of the year in connection with one of the affected schools, viz., Bodringallt.

Information regarding the first cases in this school was received from Dr. E. L. Phillips, and an investigation was forthwith begun. Two divisions of Class II. were found to be involved, and the date of visit in each case ascertained. A list of the scholars attending in those two divisions was obtained, and the children were excluded only during the week when symptoms were expected to develop, viz., from the 22nd to the 26th of January inclusive. In the course of that week an inquiry at their homes concerning all the excluded children was undertaken, and a considerable number was found to be suffering from measles. Unfortunately, the success of the experiment was marred by the want of strict isolation at the homes, as information was obtained that children in an infectious state not infrequently played with and probably infected other children in the streets. Subsequent inquiry, however, indicated that the two indivisions at Bodringallt School suffered comparatively little during the remainder of the epidemic period in that part of the district, and it was not found necessary to close the department. It is rather an anomaly that this particular school should suffer in respect of grant on account of the exclusion of the two divisions, whereas if the whole school were closed the closure would not involve the loss of grant, notwithstanding the educational gap in the life of the children which such a step would entail.

Pentre and Gelli Infants' Departments were closed for short periods during the year on account of measles, the former from the 29th of January to the 26th of February, and the latter from the 15th of January to the 16th of February, all dates being inclusive.

As regards local incidence, it will be seen on reference to Tables 14 and 15 that Ward 9 suffered most severely, with 27 deaths, whereas only 2 were registered from Ward 6.

It is noteworthy that of the 127 deaths, all except 7 were of children under 5 years of age.

Statistics bearing upon measles will be found in Tables 12, 13, 14, 15, and III. in the Appendix.

SCARLET FEVER.

	1912.	Average for Ten Years. 1902-1911.
Number of cases	926	653
Number of deaths	19	18
Death-rate per 1,000, Rhondda	.12	.14
,, ,, 95 Great Towns	.06	
,, ,, England & Wales	.05	.14

A slight increase has to be recorded in the prevalence of scarlet fever in the district during 1912 as compared with 1911, the respective total numbers of notifications having been 926 and 897. The total for 1912 is greater by 273 than the average of the totals for the ten previous years. The mortality-rate—.12 per 1,000—attributable to this disease has, however, remained stationary, and shows even a slight decrease when compared with the average of the similar mortality-rate for the ten previous years.

Nineteen deaths occurred during the year, this being equivalent to a case-mortality of 2 per cent.

The rate of incidence of the disease among the population—5.86 per 1,000—remained much the same as in recent years, but exceeded the rate for the whole of England in 1912 by 2.91 per 1,000 and that for the whole of Wales by 2.51.

During the year, 245 cases of scarlet fever were removed to hospital, this being 26.5 per cent. of the cases notified. The hospital accommodation available was, however, utilised to the fullest possible extent during the year.

There was not so much variation as usual in the incidence of the disease on the populations of different wards, as shown by the notification returns for each ward. Ward 2 suffered most with 196 cases notified, while Ward 10, with 31 cases, was the least affected. (See Table 19).

The ratio borne by the secondary cases to the total number of cases notified during the year was 22 per cent., as compared with 24, 24, 23, 25, 21, 23, 26, 21, 21, 22, and 21 per cent. for the years 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, and 1911 respectively.

In accordance with the figures obtained in previous years, the average number of persons per house in scarlet fever infected houses was found to be greater than that found for the whole district in the census enumeration of 1901, the respective figures being 6.8 and 5.9. The similar figure obtained at the 1911 census is not at the time of writing available for this comparison.

Statistics bearing upon scarlet fever will be found in Tables 12 to 15, Table 17, Tables 19 to 25, and Table II. in the Appendix.

DIPHTHERIA.

	1912.	Average for Ten Years. 1902-1911.
Number of cases	205	240
Number of deaths	19	32
Death-rate per 1,000, Rhondda ...	.12	.24
,, ,, 95 Great Towns...	.13	
,, ,, England & Wales	.11	.16

The total number of notifications of diphtheria received during the year was the largest received in any year since 1904, and amounted to 205.

In the course of the year there occurred 19 deaths, equivalent to a death-rate of .12 per 1,000. This rate is very similar to the death-rates pertaining to the 95 Great Towns and England and Wales as a whole.

The death-rate for the year in the Rhondda attributable to diphtheria compares very favourably with the average of the similar death-rate for the previous ten years, the latter being exactly twice as high as the former. The case-mortality rate was 9 per cent., which is the lowest rate recorded since the adoption of the Notification Act in 1904.

The number of notifications received during the year was in excess of the number received in 1911 by 79, and this excess was mainly due to an epidemic prevalence of the disease in Maerdy. Careful systematic inquiries were made in Maerdy, but no common cause of infection was discovered either in the schools or in the homes of the patients. The type of disease was, however, a mild one in Maerdy, and doubtless a number of cases were never recognised as cases of diphtheria.

As regards the age incidence of the disease, 93, or nearly one-half of the total number of cases, were aged from 5 to 12 years, the period of greatest incidence thus practically coinciding with the usual school age.

The heaviest fatalities occurred in the first, second, and third years of life, with the respective case-mortalities of 50.0, 44.4, and 33.3 per cent. (Table 29).

The percentage of secondary to the total number of cases, which had been declining steadily for a number of years, showed a slight but possibly significant rise as shown in the table given below. There is a possibility that the rise indicates an increase in the infectivity of the disease and that increased prevalence of diphtheria may be expected during the next few years.

Table showing the percentage of secondary to the total number of cases notified since 1898:—

Year.		Total Cases.		Primary Cases.		Proportion of Secondary Cases to Total.
1898	...	883	...	629	...	28.7 per cent.
1899	...	1,804	...	1,288	...	28.6 ,,
1900	...	1,102	...	855	...	22.4 ,,
1901	...	1,128	...	905	...	19.7 ,,
1902	...	757	...	624	...	16.2 ,,
1903	...	327	...	286	...	12.5 ,,
1904	...	214	...	196	...	8.4 ,,
1905	...	139	...	124	...	10.8 ,,
1906	...	194	...	181	...	6.7 ,,
1907	...	177	...	164	...	7.3 ,,
1908	...	185	...	175	...	5.4 ,,
1909	...	177	...	173	...	2.3 ,,
1910	...	106	...	100	...	5.7 ,,
1911	...	126	...	119	...	5.6 ,,
1912	...	**205**	...	**184**	...	**10.2** ,,

The incidence of diphtheria was highest in the month of January, which had a total of 47 notifications, and lowest in the month of September, which had a total of 10.

As regards local incidence, Ward 10 was the most implicated with 95 cases, and Ward 5 with 3 cases had the cleanest record.

As in the case of scarlet fever, the average number of persons per house in diphtheria-infected houses exceeded the average number for all the houses in the district as ascertained by the census enumeration of 1901, the respective figures having been 6.7 and 5.9.

For further statistics relating to diphtheria, see Tables 12 to 17, 26 to 32, and Tables II. and III. in the Appendix.

TYPHOID FEVER.

	1912.	Average for Ten Years. 1902-1911.
Number of cases	71	162
Number of deaths	16	22
Death-rate per 1,000, Rhondda ...	.10	.17
,, ,, 95 Great Towns...	.04	
,, ,, England & Wales	.04	.08

During the year there were notified 71 cases of typhoid fever in the district as compared with 138 in the previous year.

The rate of incidence of the disease on the population of the district was practically double that of England or Wales taken as a whole.

Sixteen deaths from typhoid fever occurred in the course of the year, this being equivalent to a death-rate of .10 per 1,000 of the living population. This death-rate is more than double those for the 95 Great Towns and for England and Wales, but is considerably less than the average of the death-rates for the previous ten years in the Rhondda. Ward 8 contributed 9 of the fatal cases, Wards 2 and 9, 2 each, and Wards 4, 5, and 7 one each.

Of the notified cases 56, or nearly 79 per cent., were removed to the Council's Hospital.

A large proportion of the cases occurred at Cymmer and Trebanog, and some suspicion rested on a spout on the hill-side at Cymmer used for the water supply of a number of houses and also much used for drinking purposes by colliers on their way to and from work. Notices were issued to householders in the district for the purpose of warning them against drinking unboiled water or milk, but the cases continued to occur at irregular intervals and with no discoverable circumstances in common, with the exception of the use of the suspected water, which applied to a majority of the cases. It is known that these warnings were not infrequently ignored, especially by workmen who had occasion to pass by the suspected source of supply when returning from work.

A total number of 29 cases were notified in Ward 8, while in Ward 6 no case of typhoid fever occurred throughout the year.

The average number of persons per house in which typhoid fever occurred was found to be 6.9, as compared with 5.9 which was the average per house for the whole district found in the census enumeration of 1901.

Further statistics relating to typhoid fever will be found in Tables 12 to 15, 16 and 17, 33 to 38, and II. and III. in the Appendix.

CEREBRO-SPINAL FEVER.

No case of this disease was notified throughout the year. It is convenient to mention here also that no outbreak of a somewhat similar disease—acute poliomyelitis—was reported in the district during the year. Both these diseases are compulsorily notifiable.

WHOOPING COUGH.

	1912.	Average for Ten Years. 1902-1911.
Number of deaths	80 ...	39
Death-rate per 1,000, Rhondda ...	.51 ...	.30
,, ,, 95 Great Towns...	.26 ...	
,, ,, England & Wales	.23 ...	.26

As far as can be judged from the number of deaths from whooping cough recorded during the year, there was a very considerable prevalence of this disease throughout the district. Ward 10, with 23 deaths, suffered most heavily, but only one death was recorded in Ward 1.

Apparently the month of greatest prevalence was the month of March, when 22 deaths were recorded, whereas no deaths from this disease were registered during November.

DIARRHŒA.

	1912.	Average for Ten Years. 1902-1911.
Number of deaths	39	... 183
Death-rate per 1,000, Rhondda ...	.25	... 1.34
,, ,, England & Wales		... .56

In the course of the year only 39 deaths were ascribed to diarrhœa, this being equivalent to a death-rate of .25 per 1,000 of the population. This death-rate is lower by 1.09 than the average of the similar death-rates for the previous decennium, and is an exceptionally low death-rate for the district.

The low mortality for the year is doubtless largely accounted for by the extremely wet and cold summer, which was unfavourable to the development of diarrhœal diseases.

It has been observed that the diarrhœa mortality "curve" follows the "curve" of the earth temperature at a depth of 4 feet; that is to say, the maximum death-rate from diarrhœa occurs immediately after the temperature of the earth at 4 feet has reached its highest. A glance at Table 40 in the Appendix will show that although the number of deaths was too small to form a reliable index, some support is given to the rule.

Examining the age periods at which fatal cases of diarrhœa occurred, as shown in Table III. in the Appendix, it will be seen that 32 out of the total of 39 occurred in the first year of life.

It has been repeatedly shown that diarrhœa is not often fatal except in the first years of life, and, to a lesser extent, when associated with the enfeeblement of old age. It is obvious, therefore, that attempts to secure a lessening of diarrhœa mortality must be directed towards the protection of very young children.

To this end many experiments have been made by different Sanitary Authorities, including the establishment of infants' milk depôts, the circulation of literature bearing upon infant care, and the employment of health visitors. As a result of the experience gained, the employment of health visitors is now regarded as being the most generally applicable method of protecting infant life, and in the course of the year 1912 the Rhondda Council appointed four additional health visitors to supplement the work done by the two originally appointed. The employment of the six health visitors, each appointed to a separate district, provides an excellent method of keeping under observation the infants of the district practically from birth, the adoption of the Notification of Births Act in the district having provided the means of getting into touch with the infants and their mothers at a very early date after the occurrence of the births.

During the years 1902 to 1909, literature relating to the proper way of rearing infants was handed to each mother on the registration of her newly-born child by Mr. George Williams, the Registrar of Births for the Ystradyfodwg part of the district. This practice was discontinued in 1909 owing to the appointment of two health visitors by the Council.

Below is given a table showing the number of deaths from diarrhœa of infants under one and the resulting rates in Ystradyfodwg and in the rest of the district:—

	Sub-District.	No. of Births.	No. of Deaths of Children under one from Diarrhœa.	Death Rate per 1,000 Births.
1901	Ystradyfodwg ...	3,599	267	74
	Rest of District ...	987	57	58
1902	Ystradyfodwg ...	3,880	85	22
	Rest of District ...	1,057	23	22
1903	Ystradyfodwg ...	3,789	81	23
	Rest of District ...	1,108	21	19
1904	Ystradyfodwg ...	3,819	178	46
	Rest of District ...	1,041	33	31
1905	Ystradyfodwg ...	3,687	123	33
	Rest of District ...	977	49	50
1906	Ystradyfodwg ...	3,824	161	34
	Rest of District ...	927	29	31
1907	Ystradyfodwg ...	3,854	104	27
	Rest of District ...	981	19	19
1908	Ystradyfodwg ...	4,343	281	65
	Rest of District ...	1,111	38	34
1909	Ystradyfodwg ...	4,405	144	33
	Rest of District ...	1,172	30	26
1910	Ystradyfodwg ...	4,381	74	17
	Rest of District ...	1,247	20	16
1911	Ystradyfodwg ...	4,277	200	47
	Rest of District ...	1,214	46	38
1912	Ystradyfodwg ...	4,114	30	7
	Rest of District ...	1,122	9	8

NOTE—No cards issued in 1901.

Cards distributed in Ystradyfodwg only in the years 1902-9 (8 years).

Distribution discontinued from the 30th June, 1909.

From 1909 to the beginning of 1912, the two health visitors originally appointed carried out a campaign in part of the district for the prevention of diarrhœa mortality, and the value of their work was fully considered in my last annual report. The four additional health visitors commenced work on the 1st of June, 1912, and doubtless their ministrations formed a not inconsiderable factor in the production of the remarkably low diarrhœa mortality-rate for the year.

PUERPERAL FEVER.

	1912.	Average for Ten Years. 1902-1911.
Number of cases	15 ...	21
Number of deaths	5 ...	10
Death-rate per 1,000 Rhondda ...	.03 ...	.08

In the course of the year, 15 cases of puerperal fever were notified and resulted in 5 deaths, which gave a death-rate of .03 per 1,000 of the population. Comparing the average death-rate of the last decennium with that of the decennium immediately preceding, we find that the former is less than the latter by .06, the respective figures being .08 and .14. (Table 42).

The Medical Officer of Health for the County of Glamorgan has from the beginning carried out the supervision necessary in connection with cases of puerperal fever on behalf of the County Council, which is the supervising authority under the Midwives Act for the whole of the Administrative County of Glamorgan.

The Health Department of the Rhondda Council, however, carries out certain duties under the Act, especially in connection with the disinfection of clothing, instruments, and persons of midwives in attendance on notified cases of puerperal fever.

TUBERCULOSIS.

For administrative and other purposes a broad distinction has hitherto been drawn between the pulmonary and all other forms of tuberculosis. In the course of the year 1912 only the pulmonary form was compulsorily notifiable throughout the urban area.

PULMONARY TUBERCULOSIS.

	1912.	Average for Ten Years. 1902-1911.
Number of cases	352	...
Number of deaths	105	... 102
Death-rate per 1,000	.66	... .75

As seen from the above table, the total number of deaths throughout the Rhondda in 1912 attributable to the pulmonary form of tuberculosis was 105, equivalent to a death-rate of .66 per 1,000, or .09 less than the average for the ten previous years. The number of notifications received amounted to 352, consisting of 37, 7, and 308 notified under the respective Regulations mentioned below.

On the first day of the year now under review the Public Health (Tuberculosis) Regulations, 1911, became operative and made compulsory the notification of all cases of the pulmonary form of tuberculosis, which was previously compulsorily notifiable only when occurring in "poor persons" or in individuals attending for treatment amongst in-patients or out-patients at Hospitals or other similar institutions for the treatment of the sick, which are wholly or partially supported otherwise than by contributions of the persons treated thereat or of their relatives or guardians and otherwise than from rates and taxes. Up to the end of the year 1912 these several classes of tuberculous persons became compulsorily notifiable under three different Orders issued by the Local Government Board, viz., The Public Health (Tuberculosis) Regulations, 1908, the Public Health (Tuberculosis in Hospitals) Regulations, 1911, and the Public Health (Tuberculosis) Regulations, 1911, which respectively became operative on the first of January, 1909, first of May, 1911, and the the first of January, 1912. On the 19th of December, 1912, there were issued the Public Health (Tuberculosis) Regulations, 1912, which make compulsory, for the first time, the notification of all forms of tuberculosis, pulmonary and other, with certain exceptions which are specified in Article XIV. of the Regulations. This Order did not become operative until the first day of February, 1913, after which date all the previous Regulations bearing upon tuberculosis referred to above will cease to have effect.

Much interest in this disease has been shown during the year 1912 throughout the country generally, and the consequent amount of attention given to the ways and means of dealing with it has resulted in the adoption of measures of various kinds which aim at the early reduction of its prevalence and at its ultimate eradication. The financial provisions made in the National Insurance Act, 1911, and in the Finance Act of the same year served to direct the activities of many persons, individually and collectively, to the problem presented by the influence which tuberculosis has exerted for so many years in swelling the mortality bills of the country.

Until the issue of the Public Health (Tuberculosis) Regulations, 1912, local sanitary authorities and those depending upon them for information and guidance have not been given the opportunity to attack in a direct manner this very insidious and widespread disease, and the limitation and prevention of its ravages form a problem the solution of which will require the cordial co-operation of all bodies and persons whose interest and assistance can be invoked. The efforts of the Welsh National Memorial Association, whose *raison d'etre* in the form it has taken is the eradication of tuberculosis throughout Wales, seems to have had the unfortunate result of lulling local sanitary authorities into a state of somnolence in this matter and of satisfying them that all the measures necessary for the eradication of this disease will be speedily and successfully taken, unaided, by the Association. It may be said, with some justification, that this attitude is to no small extent due to some of the over-sanguine advocates of the surrender to the Association by the Counties and County Boroughs of the means of doing good in this direction possessed by the various sanitary authorities throughout Wales. Given the means of taking effective action which the Insurance Act provides, the large number of sanitary authorities throughout the country, with their experience, capacity, and administrative machinery could, collectively and individually, do an enormous amount of effective work towards the reduction and eradication of this disease. The Association, with but one administrative machine possessed of relatively limited powers, scope, and experience, cannot reasonably be expected to do more than a small fraction of the amount of work, in the aggregate, which the large number of sanitary authorities throughout Wales are capable of performing. Doubtless some authorities would be disposed to show less activity than others, but with the powers of granting and withholding possessed by the Government Departments concerned and the Insurance Commissioners, effective stimulation could easily be applied to the County Councils or County Boroughs which might show an undue amount of inactivity and indifference. Some of the most conscientious and progressive authorities in the country have provisionally agreed to transfer their obligations to the Association with some misgivings and doubts, and further experience and consideration have in some cases already led to a reversal of the policy of transference. The sooner other authorities realise the magnitude and importance of their individual responsibilities in this connection the more favourable will be the prospects for the early reduction and ultimate eradication of the disease in Wales. There would still remain ample scope for the display of the activities of the Welsh National Memorial Association if only in the provision, management, and control of sanatoria, the organisation of educational measures, and the consideration of exceptional circumstances calling in certain districts for special assistance which the Association with its private funds could so easily and judiciously render.

NON-PULMONARY TUBERCULOSIS.

There occurred throughout the year 45 deaths from all forms of tuberculosis other than the pulmonary. This number is equivalent to a death-rate of .28 per 1,000 of the living population. The number of non-fatal cases is not known as this form of the disease did not become compulsorily notifiable until the first of February, 1913.

INFLUENZA.

	1912.
Number of deaths	14
Death-rate per 1,000 Rhondda	.09

As far as can be ascertained from the death returns there was no exceptional prevalence of influenza, although more deaths were directly attributed to influenza in 1912 than in 1911. During the year 1912, 14 deaths occurred, as compared with 9 in 1911 and 14 in 1910.

Ward 10 contributed 5 of the fatal cases, Ward 9 contributed 4, Ward 7, 2 cases, and Wards 3, 4, and 8, one each. In Wards 1, 2, 5, and 6, no death from this cause occurred during the year.

COLLIERY FATALITIES.

Number, 53—equivalent to a death-rate of .34 per 1,000. No colliery disaster of great magnitude occurred in the district throughout the year. The 53 deaths which occurred were due to minor causes, such as falls of roof. The total corresponds closely to the average annual number of deaths from this cause in the district.

INQUESTS.

Total, 142, equivalent to a death-rate of .90 per 1,000. If the accidents associated with the collieries be excluded, the number falls to 89, or .56 per 1,000 (Table 45).

THE TYNTYLA ISOLATION HOSPITAL.

Accommodation. The accommodation for patients remained the same as in the previous year. Provision is made for the treatment of three diseases at the same time, and the usual allocation of beds is as follows:—

	Ordinary Beds.		Observation Beds.
Diphtheria	20	...	2
Typhoid Fever	20	...	2
Scarlet Fever	34	...	2
	74		6

There is, in addition, accommodation at the old hospital for ten cases. In the case of each disease two beds can be used for observation without bringing the patients into close association with the patients in the main wards.

The total number of patients received into and treated in the hospital in the course of the year amounted to 385, whereas the numbers for the five preceding years were 87, 167, 198, 324, and 231 respectively. The total for 1912 is the highest since the erection of the hospital.

The following table furnishes a summary of the number of cases treated, the number of deaths, and the fatality in respect of each of the diseases treated at the hospital during 1912.

	No. of Cases.	No. of Deaths.	Mortality per cent.
Diphtheria ...	84 ...	2 ...	2.4
Typhoid Fever ...	56 ...	*14 ...	25.0
Scarlet Fever ...	245 ...	1 ...	0.4

* Including one death from general tuberculosis and one from cancer.

In records relating to previous years, the case-mortality in hospital-treated cases has generally been lower than in home-treated cases, as may be expected in consequence of the skilled nursing and improved environment obtainable at the hospital. During the year 1912, however, the fatality among the removed cases of typhoid fever was higher owing to the inclusion of deaths from causes other than typhoid fever, and the selection for removal of the worst type of case, such being generally unmanageable at home. Many of those removed were in a grave condition when admitted, and no fewer than 9 of the 14 fatal cases died within a week of their admission.

Below a table is given to show the mortality-rate of hospital-treated as compared with that of home-treated cases and the case-mortality for the whole district.

	Whole District.			Hospital Cases.			Rest of District (Hospital excluded).		
	Cases.	Deaths.	Mortality per cent.	Cases.	Deaths.	Mortality per cent.	Cases.	Deaths	Mortality per cent.
DIPHTHERIA (including membranous croup) ...	205	19	9·3	84	2	2·4	121	17	14
TYPHOID FEVER (including continued fever ..	71	16	22·5	56	14	25·0	15	2	13·3
SCARLET FEVER ...	926	19	2·1	245	1	0·4	681	18	2·6
	1202	54	4·5	385	17	4·4	817	37	4·5

Each district ward contributed to make up the total number of patients admitted to the hospital.

	Diphtheria	Typhoid Fever.	Scarlet Fever.
Ward 1 contributed ...	6	1	25
,, 2 ,, ...	3	3	41
,, 3 ,, ...	7	1	6
,, 4 ,, ...	6	7	36
,, 5 ,, ...	0	2	42
,, 6 ,, ...	3	0	21
,, 7 ,, ...	2	8	20
,, 8 ,, ...	3	25	28
,, 9 ,, ...	3	9	24
,, 10 ,, ...	51	0	2
Totals	84	56	245

The average time spent in hospital by recovered cases was 40 days in the case of diphtheria (the extremes varying from 25 to 85 days), 45 days in the case of typhoid fever (between limits of 20 and 103 days), and 50 days in the case of scarlet fever (the extremes varying from 19 to 114 days).

Of the cases which terminated fatally, the average time in hospital in the case of diphtheria was 8 hours, and 19 days in the case of typhoid fever and scarlatina.

The maintenance rate for the year amounted to £1 1s. 6d. per patient per week, the total expenditure amounting to £2,712 17s. 8d., apportioned as follows:—

Salaries and Wages	£787	7	5
National Health Insurance	9	7	0
Bread	69	12	9
Eggs	10	13	10
Fish and Vegetables...	121	15	11
Milk	242	2	6
Meat	308	1	9
Groceries	282	5	0
Gas	183	16	8
Coal and Firewood	217	4	10
Water	57	3	5
Gas and Water Repairs and Renewals ...	14	3	1
Stationery, Printing, &c.	10	14	7
Stimulants (Brandy, &c.)	13	2	10
Horse Feed, Saddlery, &c.	27	5	6
Drugs, Instruments, &c.	117	5	0
Boiler Insurance	4	0	9
Soap, Brushes, &c.	34	13	2
Crockery, Drapery, &c.	7	10	2
Ironmongery	9	5	7
Methylated Spirit, Turpentine, &c. ...	14	8	8
District Rate	28	8	9
Poor Rate	37	18	4
Advertisements	6	8	0
Carried forward ...	2614	15	6

	£	s.	d.
Brought forward ...	2614	15	6
General Repairs	23	14	5
Chimney Sweeping	1	3	0
Postage and Carriage	1	6	11
Repairs to Furniture...	41	19	0
Wheelbarrow	1	14	1
Laundry Appliances (Belting)	1	6	11
Feed Pumps	16	4	0
Waterproof Bed Sheeting	10	8	4
Sundries	0	5	6
	£2,712	17	8

In addition to the above, which are the usual expenses for maintenance, payments under contracts, some of which were entered into in the previous year, were made in the course of 1912 in respect of furniture, crockery, new water tank, shrubs, &c., as shown in the subjoined table.

	SMALL-POX HOSPITAL	ISOLATION HOSPITAL.	
	Structural a/c.	Structural a/c.	Establishment a/c
	£ s. d.	£ s. d.	£ s. d.
Furniture and Bedding (E. H. Davies & Son) ...	37 14 6	338 11 6	16 10 7
Crockery (P. E. Gane, Ltd.) ...			23 8 11
Trees, Shrubs, Manure, &c., for grounds ..		21 19 4	
Water Tank ... (Council's Gas & Water Department)		237 10 0	
Expenses incidental to water tank ...		9 16 1	
	37 14 6	607 16 11	39 19 6

As in the case of the two previous years, the routine medical attendance upon the patients and the administration of the nursing and domestic staffs were respectively performed in a faithful and attentive manner by Dr. J. Lambie and Miss R. E. Smith, the latter being assisted by Miss May Shelton, the Assistant Matron.

PENRHYS ISOLATON HOSPITAL.

This institution has been built on the ridge separating the two valleys from each other, for the purpose of accommodating and isolating cases of small-pox which may arise in or be introduced into the district. During the year 1912 one such case was admitted into the hospital from the Llwynypia Homes, and the great advantage of having a building set apart and always ready for such a purpose was demonstrated.

Accommodation. One pavilion contains two wards, each of which provides accommodation for 8 patients. Another pavilion contains two small wards with two beds in each, and is suitable for the isolation and observation of doubtful cases and contacts.

The institution also comprises administrative and laundry blocks, in the former of which a caretaker and his wife are accommodated.

SCAVENGING AND REFUSE DISPOSAL.

The methods of dealing with house refuse in the district remained substantially the same throughout the year. The greater part of the district is scavenged by contract, but a portion, consisting of Porth and Ynyshir, has during the last few years been done by the Council by direct labour. House refuse is collected daily from nearly every house in the district, the only exceptions being outlying farms and cottages. The householders supply their own ash-buckets and no restrictive regulations as to the materials of construction of these have been so far enforced by the Council, but they must necessarily be small enough to allow one man to lift and empty them. Old pails and wooden boxes are generally used and, in virtue of the daily collection of refuse, an undue accumulation of rubbish is avoided by a proper and sufficient use of such receptacles. On other grounds, however, it is desirable that the Council should take advantage of the powers conferred on them in their Act of 1910 to require the occupier of any dwelling-house to provide galvanised iron (or enamelled iron) receptacles of such size and construction as may be approved by the Council. At present some inconvenience, annoyance, and risk are caused to the public by the unclean and littered condition of our streets occasioned by refuse derived from the miscellaneous and often unsuitable receptacles now utilised for this purpose.

All the refuse is collected daily between 8 a.m. and 1 p.m., and is disposed of by dumping on sixteen authorised sites situated at different parts of the district, no portion of the refuse being now burnt, the Mason two-cell destructor in use at Ystrad since 1901 having been abandoned a couple of years ago.

In the more congested parts of the urban area, it has become impossible to obtain sites for tipping refuse, that derived from these localities being carted long distances at considerable cost. The Council, however, by means of a private Act passed in 1911, have obtained powers to purchase lands and to construct thereon and use works for the disposal of the refuse of the district. The Act authorises the Council to acquire various plots of land in different parts of the district, and at the time of writing the necessary negotiations for the acquisition of at least one of the sites have been completed and, subject to certain conditions, the contract has been let for the erection of a modern destructor at Porth, which is the locality where such a convenience for refuse disposal is at present most urgently required.

Under the powers conferred by the Act, the Council have entered into an agreement to dispose of the heat derived from the use of their destructors to the Electric Power Distribution Company, who in their turn will provide the Council with electricity in bulk on terms agreed upon. The destructor to be erected at Porth is designed to dispose of 82 tons per diem, and will, therefore, meet the needs of only about one-third of the whole area. The portions not now included are, however, less inadequately provided for in the direction of tipping ground at the moment, but such is the rate at which the spaces acquired for this purpose become filled that it will be necessary in the course of the year 1913 to obtain rights of tipping on other ground in more than one situation, or, preferably, to secure a site, especially at the upper end of the Rhondda Fach, for the erection thereon of a destructor to meet the requirements of that area

The total cost of collection of house refuse and of its conveyance to the various tips amounted to £8,491, including the cost of scavenging districts 20 and 22, which are scavenged by the Council by direct labour. This amount is equivalent to an expenditure of 6/2.1 per house as compared with 6/-, 5/6, 4/-, 4/4, 4/6, 6/10.7, 4/10, 5/2, 5/3.4, and 4/9.4 for the years 1902-3 to 1911-12 respectively. The cost varies from year to year according to the proximity of the tips in use to the large centres of population. The above figures do not include other incidental expenses which arise in connection with the present method of refuse disposal and which vary considerably from year to year, the amount of the variation actually experienced during the last ten years reaching nearly £700, the extremes during that period ranging froom over £900 in 1909-10 to over £1,600 in 1912-13. The items of expenditure thus incurred include fencing, drainage, disinfection, and labour.

The collection being a daily one, the erection or provision of large ashbins or ashpits is unnecessary, and except at some public buildings such as schools and a few isolated houses or groups of houses, such provision is seldom made.

SEWERAGE AND DRAINAGE.

In the year 1892 the main sewer, owned jointly by the Pontypridd and Rhondda Urban District Councils, was completed. This sewer, after running a course of 17½ miles, discharges into the Bristol Channel at a point about four miles east of Cardiff. In 1894 one main sewer was laid for each of the two Rhondda Valleys. Since that year the Rhondda Urban District Council have been almost continuously engaged in improving and adding to their sewerage system, the maintenance of which in an efficient condition is both costly and difficult owing to the rapid increase in the number of houses connected to the system, the hilly and irregular conformation of the district, the heavy rainfall and the resulting large amount of surface water which finds its way into the sewers in times of storm, and the liability of the sewers themselves to suffer damage from subsidence due to colliery operations or from river floods. In certain instances much damage has been caused to certain lengths of sewer covered over in the course of time by enormous heaps of waste from adjoining collieries, crushing and displacement of the original sewer being thus caused. For this reason it has been found necessary to have a new sewer relaid from Ferndale to Pontygwaith, in the Rhondda Fach Valley. As in this instance provision is made for relaying the new sewer along the river, much interference with the work has been occasioned by the exceptionally wet weather experienced during the last year and the completion of the contract has been much delayed, but it is expected that a few months of more favourable weather will enable the contractor to discharge his obligations under the contract.

At the present time very few houses are built on ground where it is not reasonably practicable to connect their drains with the sewerage system of the district. At Gilfach Goch, however, some of the houses within the Rhondda area are drained into the sewers of the Llantrisant Rural District Council, a similar arrangement having been mutually agreed upon with regard to certain houses at Penrhiwfer within the area of the Llantrisant Authority, which the latter cannot drain into their own sewers owing to the conformation of the locality.

The drains of the great majority of the houses in existence at the time the two principal subsidiary sewers were laid have now been connected and new sewers are laid or the old ones extended when the need arises to connect new houses. The number of houses still unconnected throughout the district is now 352, as compared with 420 at the end of the previous year (1911), and thus amounts to only one-twelfth of the 4,290 houses which were unconnected to the sewer in 1897. The location of those still remaining unconnected is shown in the subjoined table:—

Sanitary	District No.	1	contains	35	unconnected	houses.
,,	,,	2	,,	27	,,	,,
,,	,,	3	,,	66	,,	,,
,,	,,	4	,,	79	,,	,,
,,	,,	5	,,	74	,,	,,
,,	,,	6	,,	71	,,	,,

The greatest reduction in the course of the year was effected in Sanitary District No. 1, in which the 51 houses comprising Caroline Street, Blaenrhondda, were re-connected to the sewerage system of the district by the re-establishment of the sewer connections which had been temporarily severed by disastrous floods.

There remain two important groups of dwelling-house premises which are still unconnected to the sewerage system of the district. One group consists of 50 houses, known as Bush or Cwmclydach Houses, Clydach Vale, and is provided with pail closets and a proper system of slop-water drains, which, however, discharge into the Clydach Brook. The pails are emptied by the scavenging contractor, the contents being deposited on the nearest tip of house refuse. The pail system was introduced in 1907 in substitution for the highly insanitary ash-middens which existed on these premises prior to that year. The other group, consisting of 40 unconnected houses, is situated at Appletree, Dinas, and is on too low a level to permit the connection of the drains to the existing sewer, which, however, serves for the drainage of houses on the other and higher side of the same road. The difficulty may be overcome by either providing a small pumping appliance or by installing a small bacteria bed system at a suitable position between the houses and the river.

The extent and character of the means of excrement disposal throughout the Rhondda Urban District at the end of 1912 are set out in the appended table, which is a summarised compilation of the returns and reports furnished by the sanitary inspectors.

No. of privies with fixed receptacles (middens, cesspits)	89
No. of privies with movable receptacles (pails)...	57
No. of water closets (fresh water cistern-flushed)	22,061
No. of water closets (waste water)	0
No. of water closets (hand-flushed)	4,773

In the above table, no account is taken of supplementary water closets in better class houses, nor of those in schools, institutes, chapels, churches, halls, theatres, and other public buildings, so that the total aggregate given is considerably less than the number actually existing in the district.

Throughout the urban area there are only 146 closets which are not of the "water carriage" kind, and the number is being gradually reduced, though no actual conversions of privies into fresh-water closets were effected in the course of 1912, the reduction to 146 of the 158 recorded as having existed at the end of 1911 being due to the closure during 1912 of 12 houses possessing privies. The rate of reduction is necessarily becoming slower as the majority of the houses now provided with cesspits or middens are isolated farms or cottages, none of which, however, are situated on the gatherings grounds of any important water supply.

COMMON LODGING-HOUSES.

The number of registered common lodging-houses in the district remained the same as in the previous year. There are 8 of these establishments in the district, 5 in

Ystrad, 1 in Pentre, and 2 in Dinas, the total providing accommodation for 296 persons.

Frequent visits of inspection were paid to all the lodging-houses by the Chief Sanitary Inspector, J. Towy Thomas, and by Inspectors Jones and Owen, in whose districts all the lodging-houses are situated. The lodging-houses were found to be on the whole conducted satisfactorily.

There are no registered houses let in lodgings throughout the urban area.

One successful prosecution was conducted in respect of a house in Ystrad, which was proved to have been kept as a common lodging-house without being registered.

REPORTS DURING THE YEAR.

In addition to the ordinary statistical matter, the following subjects were dealt with in the reports placed before the Council during the year:—

Administration of Sanatorium benefit under the National Insurance Act, 1911.
An inquiry into the need for Sanitary Conveniences for Women in the district.
Bush Houses Refuse Tip.
Closing Orders under the Shops Act, 1912.
Closure of Schools due to the prevalence of Measles.
Establishment of a School Clinic and Tuberculosis Dispensary.
General Death-rate in 1912.
Draft Regulations under Section 17 (7) of the Housing, Town Planning, &c., Act, 1909.
Duties of Shop Inspectors.

Failure to take advantage of accommodation at the hospital.

Half-holiday Closing Order under the Shops Act, 1912.

Hospital haulage horses.

Houses condemnable under Section 17 of the Housing, Town Planning, &c., Act, 1909. (6).

Houses without a proper water supply. (3).

Outbreak of Diphtheria at Ferndale.

Outbreak of Diphtheria at Maerdy. (4).

Outbreak of Scarlet Fever at Cymmer.

Outbreak of typhoid fever at Cymmer.

Outbreak of typhoid fever at Trebanog.

Milk and Tuberculosis.

Paved areas for dwelling-houses.

Prevention of dampness in dwelling-houses.

Probable effect of Draft Regulations under Section 17 (7) of the Housing, Town Planning, &c., Act, 1909.

Public Health Acts Amendment Act, 1909.

Rag Flock Act, 1911.

Servants' Registries.

Shops Act, 1912.

Small-Pox.

Telephonic communication between the Tyntyla and Penrhys Hospitals.

The Public Health (Cerebro-spinal Fever and Acute Poliomyelitis) Regulations, 1912.

The Public Health (Tuberculosis) Regulations, 1912.

The need for additional clerical assistance.

Water Supply of the Pontypridd and Rhondda Joint Water Board.

Water Supply of the Cambrian Colliery Company.

Whooping Cough.

UNSOUND FOOD.

The following were destroyed during the year:—

Beef	1,654	lbs.
Bullocks' Livers ...	80	,,
Bullocks' Lungs ...	14	,,
Sheep's Pluck	16	,,
Sheep's Liver	2	,,
Pig's Fry	168	,,
Haddock	28	,,
Mackerel	20	,,
Cockles	112	,,
Oysters		36
Corned Beef	6	lbs.
Tomatoes	8	tins.
Pears	2	,,
Peaches	1	tin.
Salmon	3	tins.
Raspberries	1	tin.
Condensed Milk ...	9	tins.
Sardines	1	tin.
Rabbit	1	,,
Pineapple	1	,,
Cherries	600	lbs.

ADOPTIVE ACTS.

The Infectious Disease (Notification) Act, 1889; The Infectious Disease (Prevention) Act, 1890; and the Public Health Acts (Amendment) Act, 1890, Part III., were adopted by the Rhondda Council from January 1st, 1894, and the Notification of Births Act, 1907, from April 28th, 1909.

Summary of Police Court Proceedings during 1912.

No.	Court.	OFFENCE.	RESULT.
1	Ystrad	Concealment of case of scarlet fever	Fined £1
2	Ystrad	,, ,, ...	Fined £1
3	Ystrad	,, ,, ..	Fined £1
4	Ystrad	Tipping debris in Rhondda River...	Ordered to execute works for protection of river
5	Ystrad	,, ,, ...	Payment of costs
6	Ystrad	,, ,, ...	Payment of costs
7	Ystrad	Letting houses for occupation prior to certification	Ordered to render houses habitable and to pay costs
8	Ystrad	Tipping soil into River Rhondda ...	Fined £3 & 11/- costs
9	Ystrad	Failing to abate nuisances ...	Fined £1 & 10/- costs and ordered to abate within 7 days
10	Ystrad	Letting house for occupation prior to certification	Ordered to render habitable and to pay costs 21/-
11	Ystrad	Failing to abate nuisances ...	Ordered to abate and to pay costs. Daily penalty of 10/- after 14 days
12	Ystrad	Slaughtering on unlicensed premises	Dismissed
13	Ystrad	Failing to abate nuisances ...	Abated. Payment of costs, 9/6
14	Porth	Slaughtering on unlicensed premises	Fined £2 and costs
15	Ystrad	Letting house for occupation prior to certification	Fined 15/-
16	Porth	Failing to abate nuisances ...	Abated. Payment of costs
17	Porth	,, ,, ...	Ordered to abate and to pay costs. Daily penalty of 10/- after 21 days
18	Porth	,, ,, ...	,, ,,
19	Porth	,, ,, ...	,, ,,
20	Porth	,, ,, ...	,, ,,
21	Ystrad	,, ,, ..	Adjourned. Order to abate
22	Porth	,, ,, ..	,, ,,
23	Ystrad	,, ,, ..	Ordered to abate and to pay costs
24	Ystrad	Letting house for occupation prior to certification	Payment of costs, 9/-
25	Ystrad	Failing to abate nuisances ...	Abated. Payment of costs, 10/6
26	Ystrad	Employing shop assistants on weekly half-holiday	Payment of costs, 7/-
27	Ystrad	Shop open on weekly half-holiday	Fined £1
28	Ystrad	Shop open after closing time ...	Payment of costs, 7/-
29	Ystrad	,, ,, ...	,,

Summary of Police Court Proceedings during 1912.—*continued.*

No.	Court.	OFFENCE.	RESULT.
30	Ystrad	Failing to abate nuisances ..	Abated. Payment of costs
31	Ystrad	,, ,, ...	,, ,,
32	Ystrad	,, ,, ...	Abated. Payment of costs, 5/-
33	Ystrad	,, ,, ...	Abated. Payment of costs, 9/-
34	Porth	Shop open on weekly half-holiday...	Fined £1
35	Porth	Shop open after closing time ...	Fined 10/-
36	Porth	Failing to exhibit notice *re* shop assistants' weekly half-holiday	Fined 10/-
37	Porth	Employing shop assistant on weekly half-holiday	Fined 10/-
38	Ystrad	Keeping an unregistered common Lodging-house	Fined £1
39	Ystrad	Failing to abate nuisances ..	Fined £1 10s. 0d. and ordered to abate within 14 days
40	Ystrad	,, ,, ..	Order to abate within 14 days and to pay costs, 9/-
41	Porth	Failing to exhibit notice under section 10 (1) Shops Act	Fined 5/- and 7/- costs

In addition to the above, the defendants in 15 cases under the Shops Acts were cautioned by the Stipendiary Magistrate. and 5 other cases, also under the Shops Acts, were withdrawn with the consent of the Court.

DISINFECTION.

There has been no material change during 1912 in the methods of disinfection followed in the district. After the removal, recovery, or death of each person notified as suffering from one of the notifiable infectious diseases, including pulmonary tuberculosis, removable articles, presumably infected and capable of being disinfected by superheated steam, are conveyed in a special van to the Tyntyla Isolation Hospital, where they are subjected to steam disinfection applied by means of an "Equifex" disinfector. After the removal of the articles referred to, the infected rooms at the houses are disinfected, usually by means of formaldehyde gas generated by the application of heat to formalin tablets. In instances where patients remain at home for treatment throughout the infectious stages of the disease, disinfectants in the form of tablets of corrosive sublimate are provided for ordinary household use, printed instructions being left for the guidance of the users.

The amount of disinfection to be done has considerably increased in consequence of the greater information now obtainable concerning cases of tuberculosis since the pulmonary form of that disease became notifiable. Owing to the protracted nature of most cases of illness caused by this disease, disinfection may have to be carried out several times in connection with any particular case in consequence of removals from home to hospital, or from one house to another, or from room to room in the same house. So protracted are some of the most infective forms of this disease that it is advisable to periodically disinfect and thoroughly cleanse the room or rooms occupied by the sufferer in the interests of both the patient and those attending upon or brought into contact with him.

When the time arrives for the erection of refuse destructors in the district as already outlined, it will be important to also consider the erection, in association with one destructor, of a disinfecting and cleansing station for the whole area, the use of some of the heat derived from the combustion of the refuse being capable of being applied for the generation of the steam required for the purposes of such a station.

WATER SUPPLY.

The Rhondda Urban District, considered as a whole, is supplied with water for domestic purposes by two water authorities, the Council undertaking the supply of the greater portion of the larger Valley, and, since January 1st, 1911, the Pontypridd and Rhondda Joint Water Board carries out a similar duty in the Rhondda Fach Valley and the lower portion of Rhondda Fawr. Prior to 1911, the latter area was supplied by the Pontypridd Waterworks Company, whose undertakings were acquired by statute by the Joint Water Board, which is composed of representatives from the Pontypridd and Rhondda Urban District Councils.

The exceptionally heavy rainfall of June, July, and August of 1912 obviated a recurrence of the scarcity of water experienced in the previous year. The two driest months of the year were April and September, with their respective totals of .78in. and 1.76in., whereas the combined rainfall of the three months of June, July, and August exceeded 33 inches, July with a fall of nearly 7 inches being the least wet of the three. Under the circumstances—very fortunate ones in relation to the public health—the district escaped the penalties which are apt to attend the insufficiency of storage in relation to the population supplied which characterises, in different degrees, the undertakings of both the Board and the Council.

The Council's area of supply. There are comprised within the area supplied by the Council the 15,182 acres which embrace the Rhondda Fawr Valley from its upper end to a line passing through Trealaw and Penygraig in Wards 6 and 7 respectively. Within these limits are contained 14,810 houses, of which 13,086 are supplied from the Council's mains, the remainder being served from the various sources mentioned below.

The water is for the most part upland surface water derived from the extreme upper end of the Rhondda Fawr river and from the Selsig, Ffernol, and some unnamed tributary streams, which together constitute the normal available supply to the Ty'nywaun reservoir at the head of the valley. This reservoir has a capacity of only 7,000,000 gallons, which form the total reserve of the Council for supplying over 77,000 persons.

The water before its entrance to the mains is filtered by means of five sand filter beds situated within the same enclosure as the reservoir. The position of this enclosure renders a supply by gravitation possible to all the most populated parts of the area now supplied except two. At Blaenycwm 22 houses are supplied by means of a water ram which feeds a small tank of a capacity of 250 gallons; at Blaenclydach a pump worked by a gas engine is used to feed a service tank of 100,000 gallons capacity for the supply of about 300 houses. It is apparent, however, that in the immediate future it will be necessary or desirable to build dwelling-houses at higher situations which water from the Council's works will be unable to reach by the force of gravitation alone. There appear to be two modes of meeting the difficulty which the Council may adopt. A sufficiently high position for the new filter beds which it will be necessary to construct may be selected, or those beds may be placed on the same site as the present ones and pumping resorted to wherever the houses cannot be supplied by gravitation. An obvious objection to the latter course is the power of discouraging building on elevated situations which it places in the hands of the Council and which might be unfairly wielded in individual instances.

Mr. Octavius Thomas, the Council's Gas and Water Manager, has furnished me with the information that

193 new services were laid on to dwelling-houses during the year. Of these, 9 were required for old houses the supplies of which had failed or proved unsatisfactory. The consumption per head of the population, calculated at 5.9 persons per house, was found to amount to 20.45 gallons per day for domestic purposes, and only .71 gallon for trade purposes, all water supplied by meter being considered to belong to the latter category, and therefore to include water supplied to schools and the fever hospitals.

Owing to the exceptionally wet character of the summer, it was not found necessary to place any part of the district on short supply, and it is hoped that the area supplied will in future escape the inconvenience and risk to health, which a short supply to any extent entails, by the completion of the new storage reservoir at Llyn Fawr with an estimated capacity of 167,000,000 gallons, before the occurrence of any long periods of drought. It is now obvious, however, that the construction of this reservoir is not sufficiently advanced to justify the entertainment of the hope that any water drawn therefrom will be available until late in 1913.

Although the water now being supplied by the Council has only an inappreciable plumbo-solvent action, the character of the water which will be supplied when Llyn Fawr reservoir will become available for storage purposes may be expected to be less innocuous in this direction, for it has been found that the water derived from some of the sources which will serve to feed the reservoir has at times been markedly plumbo-solvent. It is, however, problematical as to the extent (if any) to which these plumbo-solvent waters will be modified by the qualities possessed by the water from other sources, as the respective proportions of the various kinds forming the admixture which will collect in the reservoir and the effect of their inter-action cannot be gauged with any degree of accuracy. In any event it will be incumbent upon the Council to be prepared to make such provision in the way of neutralising appliances as may be found necessary when more accurate investigations will be made possible. The tests stated in previous reports as having been made with the soil forming the bed of the new reservoir have been repeated during the year now under review. Several samples of the bed were taken throughout the year at heights varying from 1,160 to 1,169 feet (O.D.). It was found that the samples became less peaty and more clayey in proportion to the depths at which they were taken, and the plumbo-solvent qualities of the aqueous extracts made from them diminished in a like manner, although none of those taken was found to be quite free from this property. The important problem to be considered by the Council lay in the question as to whether the lowest material of which a sample was taken and which if left will form the superficial layer of the bed of the reservoir, was such as to require removal, notwithstanding the cost of such a step and the additional risk to the maintenance of the tightness of the reservoir which further disturbance of the natural bed of the lake might entail. Having regard to the relatively small amount of the plumbo-solvency and the neutrality of the reaction possessed by aqueous extracts of this soil, to the relative levels of the water nearest to the floor of the reservoir and of the water which will be habitually received into and drawn from the reservoir for the supply of the district (due allowance being made for the diffusibility of the plumbo-solvent substances), to the probably beneficial influence quâ plumbo-solvency, of the bulk of the water to be used for maintaining the supply in the reservoir, to the impossibility of removing all other factors capable of conferring this quality upon the water, and to the practicability of otherwise protecting the consumers from the risks associated with the consumption of water possessing plumbo-solvency, it appears to be the safer and more rational plan, from this point of view, to avoid further interference with what remains of the natural bed of the reservoir.

As already indicated, a considerable number of houses within the statutory limits of the Council's supply obtain water from sources other than that of the Council. The most important groups dependent upon distinct supplies are the following:—

(1) 50 houses at Fernhill.
(2) 51 houses at Caroline Street, Blaenrhondda.
(3) Over 100 houses at Blaenrhondda.
(4) Three groups at Cwmparc, of about 600, 44, and 19 houses respectively, with separate sources of supply.
(5) A small group at Ystrad.
(6) About 300 at Llwynypia.
(7) Nearly 1,000 houses at the upper end of Clydach Vale supplied by the Cambrian Colliery Company. Two small groups of 46 and 50 houses respectively and situated in this locality also derive their water from private sources.

In each of the above instances the water is unfiltered or inefficiently filtered, and in several of them there is grave danger of gross contamination of the water. Most of the supplies have been the subject of complaint by the consumers to the Health Department, and some of them have been reported upon to the Council during the year 1912. In the case of the majority of them, however, the Council have not hitherto been in a position to offer the consumers an alternative and entirely satisfactory supply, owing to the scarcity likely to be experienced in the course of long-continued droughts even without adding to the present obligations of the Council. With the completion of the new works, however, the disability thus arising will be removed and more active steps may be taken towards providing a satisfactory supply to those not now enjoying that advantage.

The shortcomings of the water supply to various portions of Clydach Vale were reported upon on several occasions throughout the year, the short periods of dry weather experienced in the spring and autumn having been instrumental in altogether depriving the houses on the higher elevations of water for days at a time. The quality of the water when delivered was also unfavourably commented upon by the consumers when investigations into the circumstances were carried out from time to time.

THE SUPPLY OF THE PONTYPRIDD AND RHONDDA JOINT WATER BOARD. The area in the Rhondda supplied by the Board comprises the portion of the district not supplied by the Council, but within the Board's statutory limits of supply there are groups of houses supplied from other sources. The total number of houses so supplied amount in the aggregate to nearly 600, the most important groups being situated at Pontygwaith, Hafod, Trebanog, and Penrhiwfer. In the case of many of the houses not receiving a supply from the Board, an opportunity to obtain such a supply has not yet been given to them owing, as in the case of Penrhiwfer, to the absence of mains in the locality. It is to be hoped that the larger or additional distributing mains which the Board have caused to be laid to Cymmer and Trebanog may also serve, directly or indirectly by means of the Trebanog tank, to enable the Board to extend their system into

Penrhiwfer, where the houses are now very inadequately and improperly supplied.

During the period immediately following the transference of the undertakings of the Pontypridd Waterworks Company by the Board, some disappointment was naturally caused by the diminution in the relative efficiency of the supply in certain localities which characterised that period. A temporary lapse was, however, to be expected with the change as the system was believed to possess a great many intricacies of distribution peculiarly its own, and that a knowledge of them and of the most advantageous way of utilising them could not be acquired for a considerable time. In the first half of 1912, many were the complaints received from various portions of our area supplied by the Board, and several reports were submitted to the Council based upon such complaints and the investigations made into the circumstances on behalf of the Council in the interests of the consumers. Later in the year the Board, on the advice of Mr. Ernest W. Terrey, their Engineer, caused to be laid a larger main to Trebanog and neighbourhood with much improvement in the nature of the supply in regard to its sufficiency, and it is understood that a similar measure is being adopted for the supply of Trealaw, which is another district which has hitherto been very inadequately supplied.

The Board is also at the present time seriously viewing its grave responsibilties in connection with the quality of the water supplied, especially in reference to the power of dissolving lead possessed to a considerable degree by the water in their reservoirs. Mr. Terrey has submitted for the approval of the Board a scheme designed to remove this dangerous quality of the water before its entry into the mains for distribution.

The Board possess two reservoirs at the head of the Rhondda Fach Valley with a joint capacity of 220,000,000 gallons, and they have also acquired statutory powers to construct another reservoir in the Llia Valley, where the site chosen would not be attended by the risk inseparable from the subsidences apt to occur in coal-bearing measures where and while the winning and working of coal are proceeding. The Llia gathering ground is also a very clean one and is devoid of human habitations.

ADMINISTRATION.

The additions to the staff forecasted in the report for the previous year were made in the course of 1912. Five additional Sanitary Inspectors were appointed for the immediate purpose of enabling the Health Committee to take advantage of the provisions of the Housing, Town Planning, &c., Act, 1909, and an outline of the work performed forms a later part of this report. One of the inspectors appointed was given Chief Inspector J. Towy Thomas's sanitary district No. 2, so as to allow the latter to devote his time to the detailed duties usually devolving upon the Chief Inspector in a large district, and much of the success of the Committee's efforts in carrying out the provisions of the Housing and Town Planning Act is due to him as well as to the readiness, facility and whole-heartedness with which the district Inspectors have co-operated to make the Committee's scheme a success.

Four additional Health Visitors were also appointed, the Council having determined that it would be most advantageous to the district for each of the six Health Visitors thus brought into their service to perform, in a sixth portion of the urban area, the duties connected with the reduction of infantile mortality and tuberculosis, as well as the "following up" of school children found defective or neglected in the course of the medical inspection conducted by the medical staff of the Council at the schools or elsewhere. The details and results of their work are dealt with in the appropriate sections throughout the report.

For the purpose of administering the provisions of the Shops Acts, two special inspectors were appointed in the first half of the year, and this branch of municipal activity was made an integral part of the Health Department.

To meet, at least partially, the increase in the clerical work of the department consequent upon the above appointments, another clerk was added to the staff.

Drs. J. Lambie and J. G. Myler, as Assistant Medical Officer of Health and Assistant School Medical Officer respectively, continued during the year to perform their duties with the skill and tact which their qualifications, years of experience, and personal attributes made possible.

No change was necessary in the staffs of the two hospitals except in some of the minor positions, and the only alteration in the clerical staff was the appointment of Mr. D. J. Lewis to fill the additional clerkship already referred to.

The additions during the year to the work of the Health Department which the above changes involved failed to prove overwhelming, mainly on account of steadfast, strenuous, and well-applied service on the part of Mr. T. J. Rees, Chief Clerk, assisted by Messrs. A. O. Morgan, D. J. Lewis, and C. G. David.

MILK AND OTHER FOOD SUPPLIES.

The greater proportion of the milk sold within the Rhondda is obtained from outside districts situated in the main in the rural portions of the County of Glamorgan, although a considerable quantity is sent from other counties, including some of the English ones, especially Somersetshire.

There are in the district 83 cowsheds with accommodation for from 450 to 500 cows. Most of the sheds are connected with the farms dotted here and there on the sides of the hills skirting the two valleys.

The provisions contained in the Regulations which were made in pursuance of the Dairies, Cowsheds, and Milkshops Order, 1885, and which have been in force in the district since April 1st, 1906, furnish the chief powers of control possessed by the Council. In the Council's Act of 1905, some other powers were secured in connection with the prevention of the spread of infectious disease by means of milk, and on occasion resort to these powers has been tried with some advantage, especially in connection with the information required under certain circumstances from dairymen as to the source of the milk they distribute and the names of the customers whom they supply.

The cowsheds as well as the 153 milkshops and dairies in use in the district are periodically inspected on behalf of the Council, and power has been granted to the Medical Officer of Health to consult a Veterinary Inspector in special cases, with reference more particularly to the existence of cows suspected to be capable of conveying tuberculosis to consumers of the milk yielded by them. Seven of the Council's inspectors now hold certificates of competence in the inspection of meat and other foods, but the most advantageous use of their knowledge cannot be made owing to the impossibility of concentrating sufficient attention on the 37 private slaughter-houses in use throughout the district. It is, of course, impossible under the present conditions to examine the carcases of all animals slaughtered in the district. The Council, however, possess powers under the provisions of the Rhondda Urban District Council (Tramways Extensions, &c.) Act, 1910, to acquire by agreement any slaughter-house within the district and to agree with the owner, lessee, and occupier of any slaughter-house for the abolition of slaughtering therein on such terms as may be arranged between the parties concerned.

There is no ground for forming the opinion that the quality of the meat sold in the district is exceptionally inferior, but it cannot be doubted that under the present arrangements much meat bearing signs of tuberculosis and other diseases is, often unwittingly, sold and eaten to the detriment of the consumers. The importation of frozen meat into the district appears to be on the increase. Very little meat preserved in pickle or similar preservative is sold throughout the area, but there appears to be no diminution in the amount of potted meat of all kinds disposed of in the course of the year.

The duty of administering the Food and Drugs Acts in the Council's area is discharged by the Glamorgan County Council.

POLLUTION OF RIVERS.

Owing to the extent to which the rivers and water-courses throughout the urban area have in the past been obstructed and polluted by the deposit of refuse in the river or on the river banks in such a position as to gravitate sooner or later into the river, the Council obtained in their Act of 1910 special powers of a less ambiguous and doubtful character than those conferred upon Local Authorities by the Rivers Pollution Prevention Act, 1876.

In the course of the year, prosecutions against two offenders were successfully conducted in the local courts; in one case,—a contractor,—penalties were imposed, and in the other,—a colliery company,—an order to execute protecting works to the approval of the Council was made and observed. Proceedings were instituted against another colliery company, but the hearing was adjourned to enable the company to submit plans and specifications of works of protection. Representations were also made to other companies where the refuse tips were being extended in such directions as to endanger the freedom from obstruction of the flow of any river or watercourse. Although most of the colliery companies have long ago realised the necessity for making arrangements to convey the refuse derived from their pits to the hillsides or mountain tops, the nearest river or stream has served for so long as the cheapest and most accessible means of disposing of the refuse that they are very apt to revert to this method whenever a temporary breakdown occurs in their less objectionable arrangements or when the occasion arises for the disposal of rubbish originating in exceptional ways or at odd times.

HOUSE ACCOMMODATION.

As in the case of the previous year, the number of houses passed for occupation in the course of 1912 showed a marked decrease as compared with the immediately preceding years. During the year now under review, only 439 new houses were certified as ready for occupation, and it is necessary to look back to 1902 to find a smaller aggregate of houses passed in one year. Moreover, when allowance is made for the comparatively large number of 64 houses which were either abandoned, demolished, or replaced, the figure is still more unfavourable as a nett increase of only 375 houses can be recorded as additions to the total number of habitable houses available for the accommodation of the increase in the population. During the last intercensal period the average number of persons occupying each house was reduced from 5.92 at 1901 to 5.7 at the census taken in 1911, notwithstanding the increase in the population of the district by over 39,000 persons between those two census enumerations. This reduction was rendered possible by the activity shown in the building trade, for during those years an average number of 750 houses became available for the accommodation of the additional population every year. During 1912, however, with less than half the above average the reverse process was in operation, for the estimated increase in population required 734 houses for its accommodation at the rate per house found to obtain at the last census taken in 1911.

From the point of view of the suitability of the houses provided to meet the needs of a large number of the applicants for tenancies, there is room for dissatisfaction. Although in the course of 1912 a few successful instances of the erection of the small bungalow type of cottage have to be recorded, the class of house which continues to be built in the district has shown very little variation in design for many years, the standard house for the area consisting of a kitchen, parlour, and 3 bedrooms, together with a pantry, scullery, coal-house, and the necessary offices. The speculative builder usually erects houses with the hope of being able to profitably dispose of them on completion, so that he necessarily makes provision for the requirements of the comparatively well-to-do, whose demands in this direction are naturally more ample and exacting than those of the unskilled or casual labourer earning barely a living wage. It is hoped that the negotiations for building land at Penygraig, Tylorstown, and Maerdy now proceeding between the Council and certain local landowners will be expedited to all the extent possible so that the necessary progress can be made towards the provision of houses for those who cannot afford to occupy the standard houses of the district without resorting to the undesirable plan of sharing their houses with other families or a number of lodgers. In this connection it is important to bear in mind the probable result in regard to the many under-tenements or cellars, now separately occupied throughout the district of the Regulations which have been drawn up by the Council in pursuance of the provisions of the Housing, Town Planning, &c., Act, 1909, and which have already been considered in modified forms by both the Local Government Board and the Council. If the finally approved form of these Regulations will result in the condemnation of many of these under-tenements, a considerable number of people will be necessarily dislodged, temporarily or permanently, and it will be difficult under the existing conditions to house them, owing partly to the circumstance that they not infrequently belong to the submerged members of the community and occasionally to the unemployed or unemployable.

Before the Regulations above referred to were prepared for submission to the Local Government Board, a special inquiry was conducted as to structural and other conditions existing at the under-tenements throughout the district, and Mr. W. J. Jones, Surveyor and Engineer to the Council, prepared, for the guidance of the Health Committee, plans and sections of each of the more common kinds of under-tenements in the urban area, and a reproduction of the drawings are included in this report.

The appended table sets out the number of houses passed for occupation in each year since 1897.

In 1898 there were 317 new houses passed for occupation.
,, 1899 ,, 157 ,, ,, ,,
,, 1900 ,, 148 ,, ,, ,,
,, 1901 ,, 187 ,, ,, ,,
,, 1902 ,, 334 ,, ,, ,,
,, 1903 ,, 483 ,, ,, ,,
,, 1904 ,, 594 ,, ,, ,,
,, 1905 ,, 904 ,, ,, ,,
,, 1906 ,, 879 ,, ,, ,,
,, 1907 ,, 827 ,, ,, ,,
,, 1908 ,, 829 ,, ,, ,,
,, 1909 ,, 1,025 ,, ,, ,,
,, 1910 ,, 926 ,, ,, ,,
,, 1911 ,, 769 ,, ,, ,,
,, 1912 ,, 439 ,, ,, ,,

The local distribution of the newly-erected houses has not been uniform throughout the whole area, as shown in the following table:—

60 houses were passed for occupation in No. 1 Ward.
56 ,, ,, ,, ,, 2 ,,
1 ,, ,, ,, ,, 3 ,,
63 ,, ,, ,, ,, 4 ,,
22 ,, ,, ,, ,, 5 ,,
13 ,, ,, ,, ,, 6 ,,
47 ,, ,, ,, ,, 7 ,,
17 ,, ,, ,, ,, 8 ,,
66 ,, ,, ,, ,, 9 ,,
94 ,, ,, ,, ,, 10 ,,

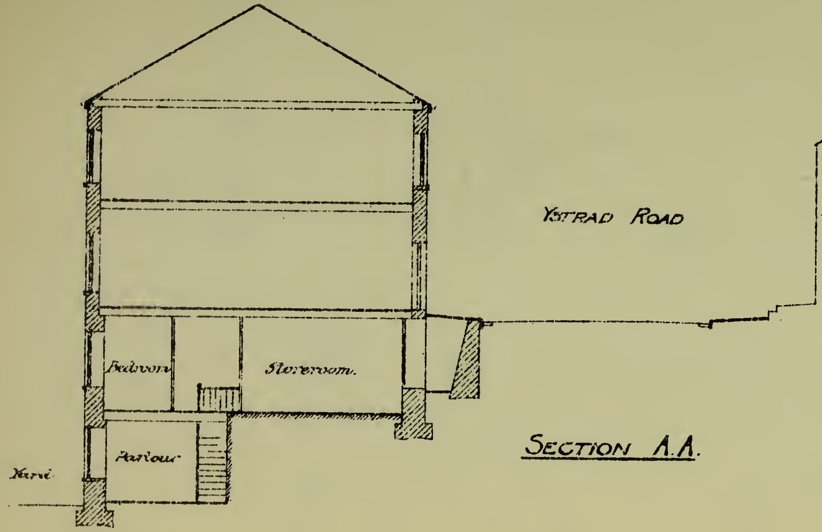
439 Rhondda.

Sheet No 1.

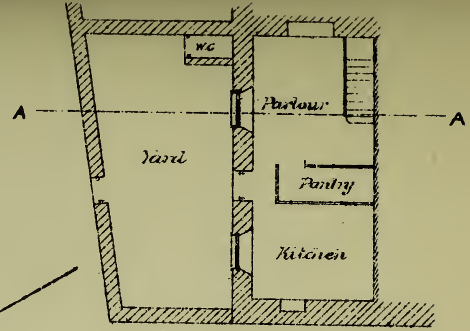
RHONDDA URBAN DISTRICT COUNCIL.

CELLAR DWELLINGS

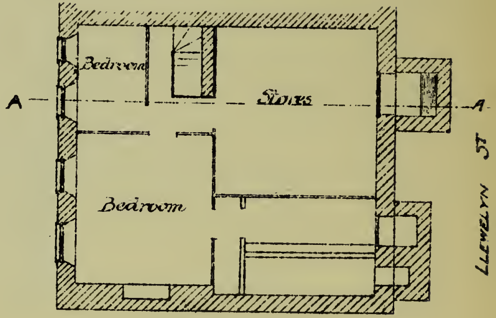
UNDER No 200 YSTRAD ROAD PENTRE



SECTION A.A.

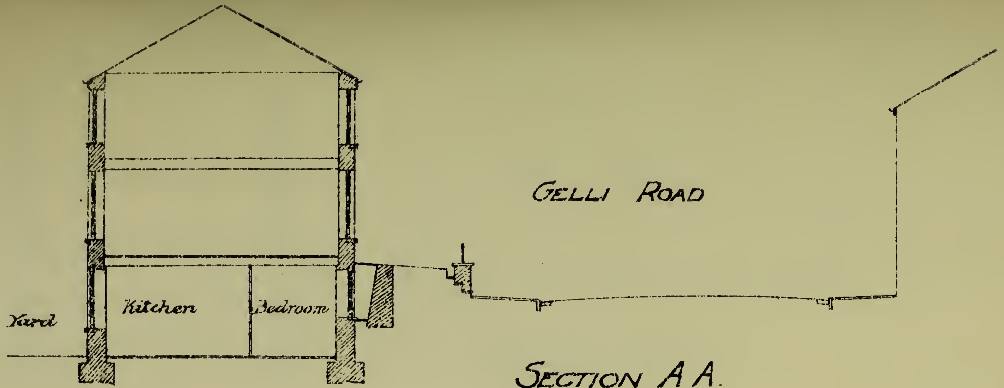


PLAN OF SUB-BASEMENT

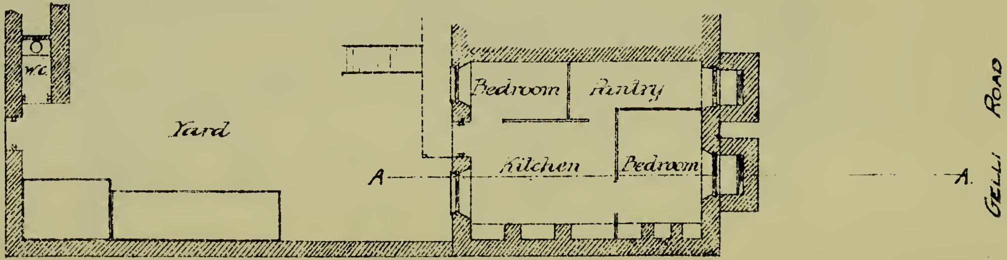


BASEMENT

Scale 16 feet to an inch.

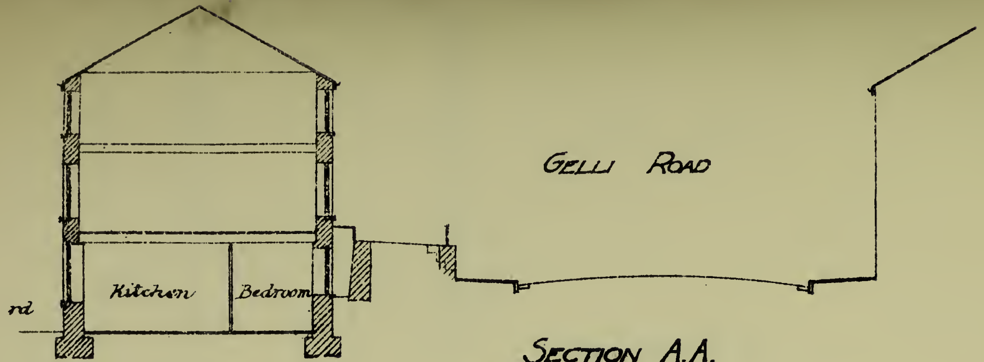


Section A A.

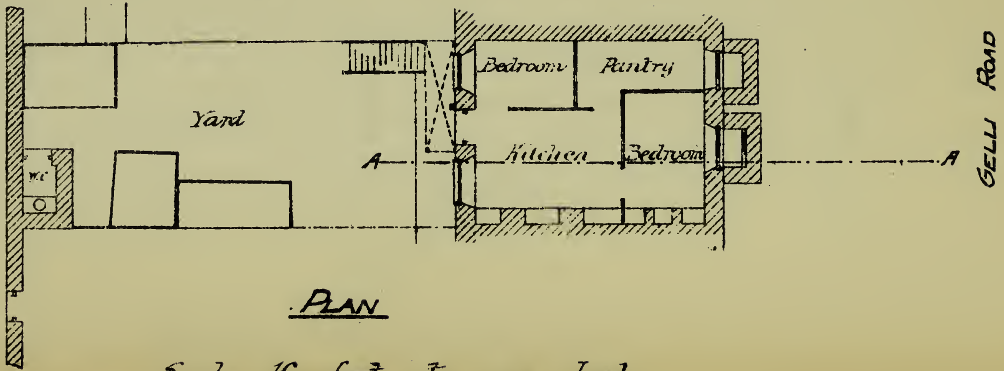


Plan

Scale 16 feet to an Inch

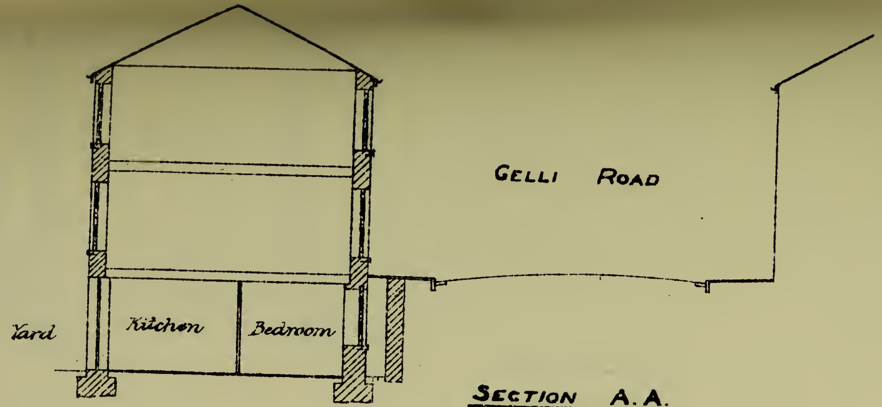


Section A.A.

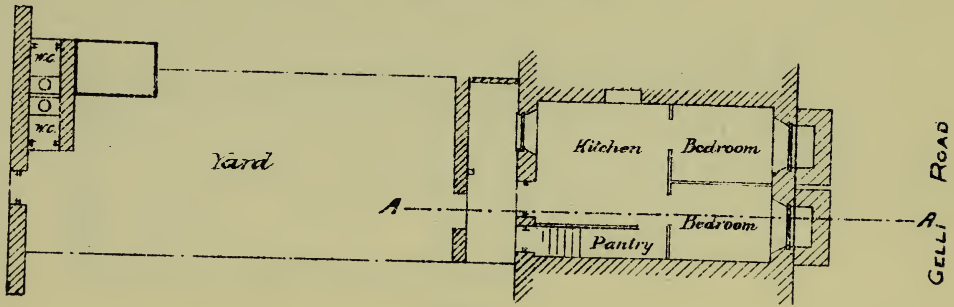


Plan

Scale 16 feet to an Inch

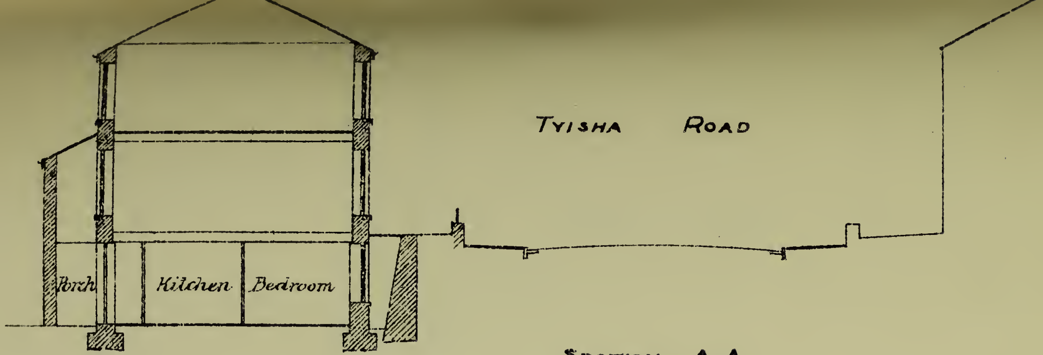


Section A. A.

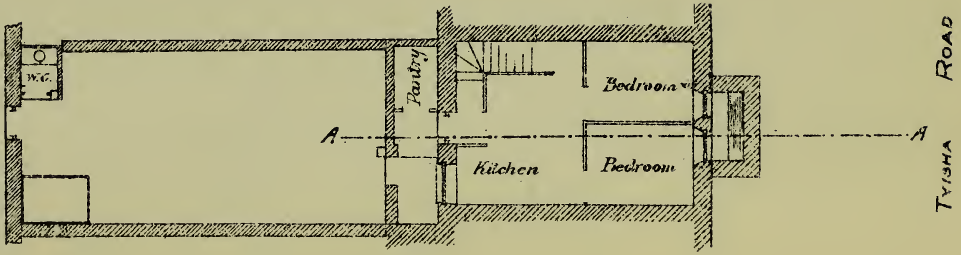


Plan

Scale 16 feet to an inch.

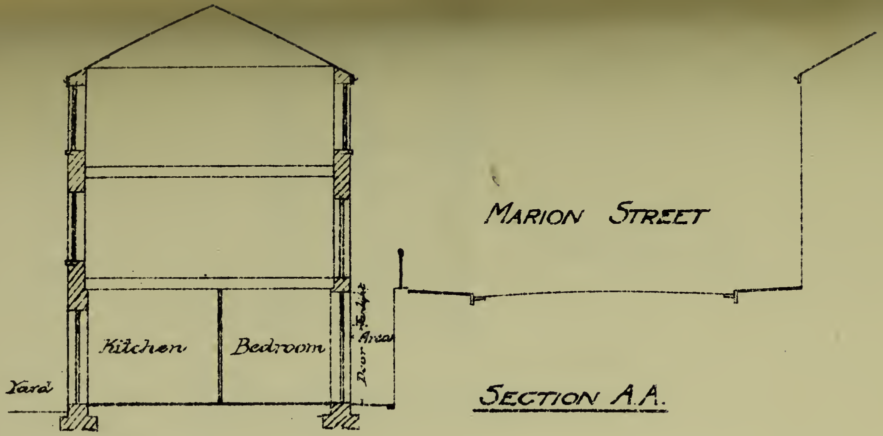


SECTION A. A.

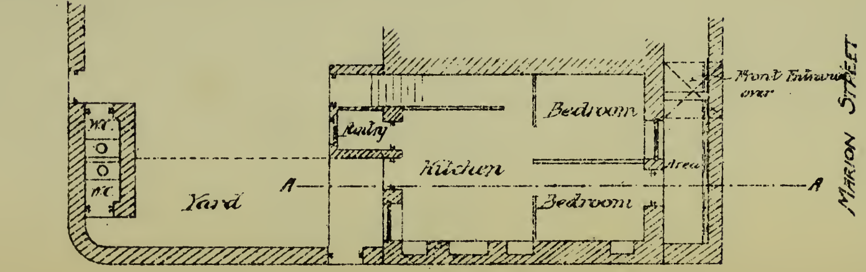


PLAN

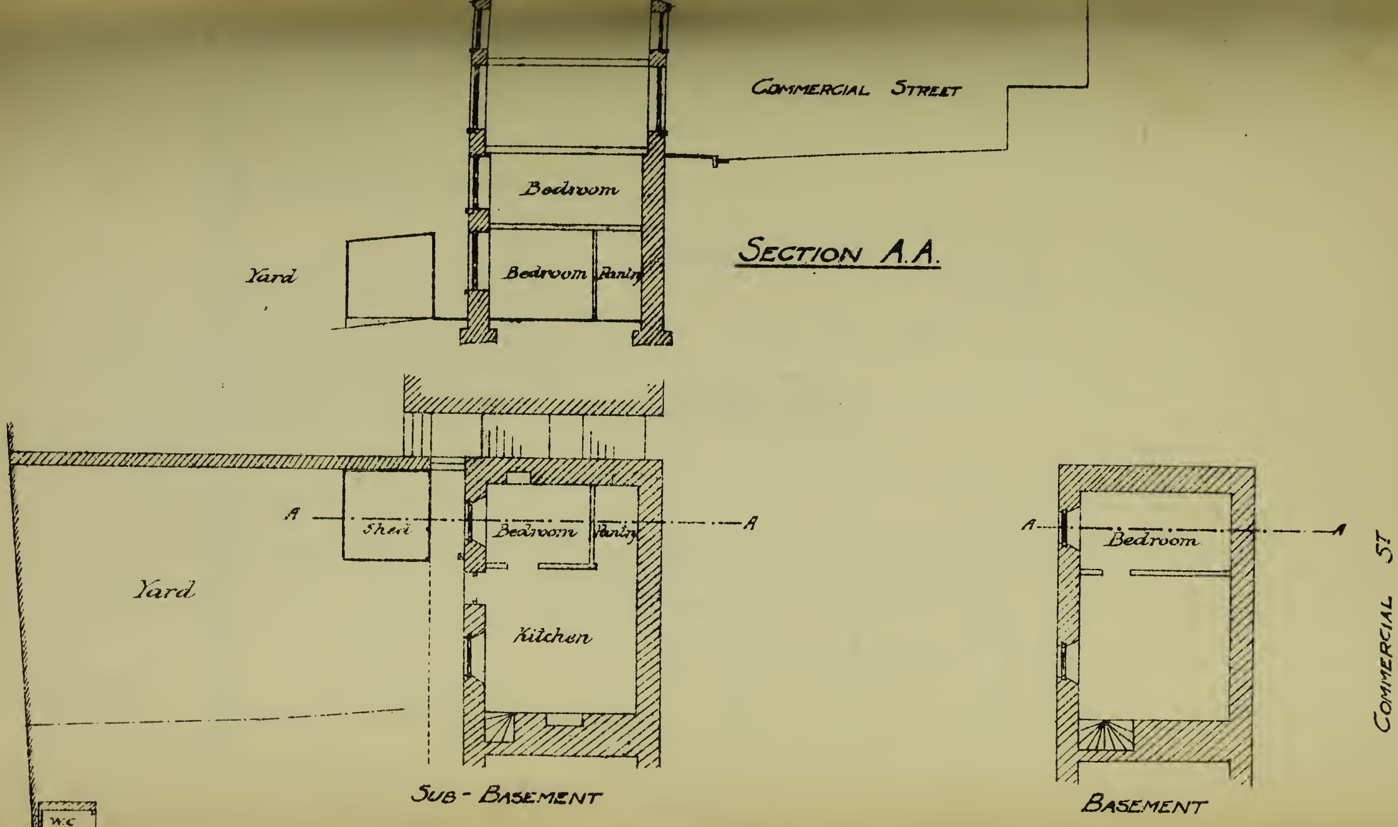
Scale 16 feet to an Inch



SECTION A.A.



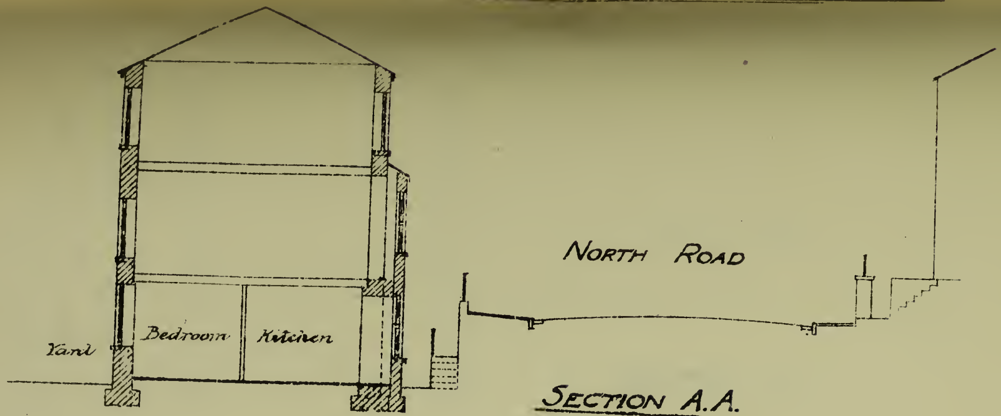
PLAN



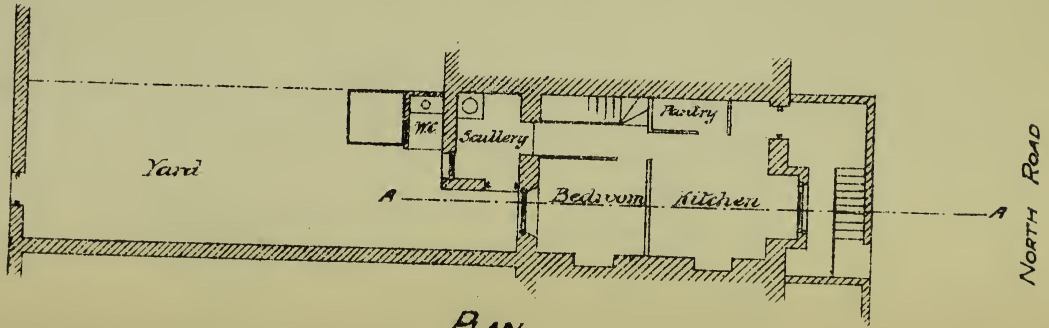
Scale 16 feet to an inch

UNDER Nº 127 NORTH ROAD FERNDALE

Sheet Nº 8.

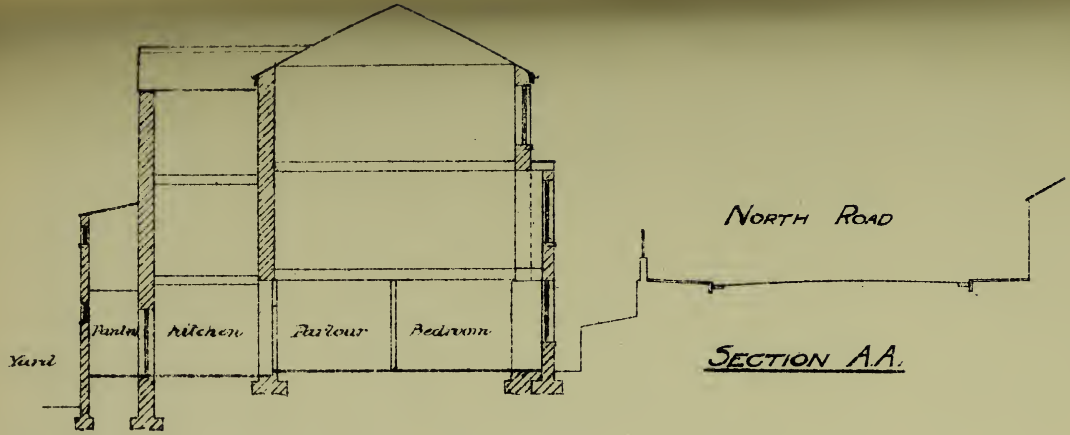


SECTION A.A.



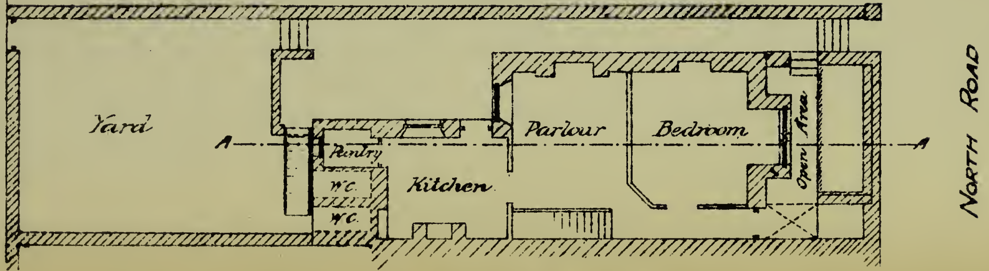
PLAN

Scale 16 feet to an inch



SECTION A.A.

PLAN



Scale 16 feet to an Inch

It will be noticed that contrary to the experience of most recent years, the activity shown in the ward comprising Ferndale, Blaenllechau, and Maerdy was relatively great. This change appears to have been largely due to the recent unlocking of tracts of building land between Ferndale and Maerdy, and the consequent erection of a large number of cottages by building clubs, to the great convenience and advantage of those living in this locality, which has during recent years shown a greater degree of overcrowding than any other portion of the district.

During 1912, plans for 431 dwelling-houses, 7 shops and dwelling-houses combined, 10 lock-up shops, one hotel, 8 halls and theatres, 4 chapels, churches and vestries, and 15 new streets were submitted to and approved by the Council (Table 48).

HOUSING, TOWN PLANNING, &c., ACT, 1909.

It may be advantageous to outline briefly the scheme adopted in carrying out the systematic house-to-house inspection of the district under the additional powers conferred upon the Council by the provisions of the Housing, Town Planning, &c., Act, 1909; Section 17 (1) of which states:—

> "It shall be the duty of every Local Authority . . . . to cause to be made from time to time inspection of their district, with a view to ascertain whether any dwelling-house therein is in a state so dangerous or injurious to health as to be unfit for human habitation, and for that purpose it shall be the duty of the Local Authority, and of

> every officer of the Local Authority, to comply with such regulations and to keep such records as may be prescribed by the Board."

Under this section the Local Government Board issued the—"Housing (Inspection of District) Regulations, 1910." Subsequently their important and far-reaching character were reported upon to the Health Committee, to which the Council has already delegated "all its statutory powers in relation to the abatement of nuisances."

In May, 1911, a special report was submitted to the Committee dealing exhaustively with the administration of the Act and the Regulations referred to; subsequently, upon the Committee's recommendation, it was resolved to augment the sanitary staff by appointing five additional Inspectors, four of whom were deputed to carry out the initial inspection, the fifth being allotted the district hitherto attended to by Chief Inspector J. Towy Thomas, who exercises immediate supervision of the whole scheme, and who has been mainly responsible for the preparation of this section of the report.

The scheme of re-organisation of the sanitary staff submitted to and adopted by the Health Committee, provided, *inter alia*, that the duties of the newly-appointed Housing Inspectors should consist of the initial inspection, and the service of preliminary notices in respect of the houses found to be not "reasonably fit for human habitation," and that all the subsequent steps to be taken to secure compliance with the requirements of the Committee in each sanitary sub-district should be arranged, supervised, and controlled by the District Inspectors, who in virtue of their knowledge of their respective districts and general experience are peculiarly competent to do so.

The 20,051 re-visits made to premises under the head "Unabated Nuisances" in Table 50 in the Appendix indicate the enormous amount of work entailed in the important duty of following up and supervising not only the abatement of nuisances, but the execution of repairs and new work in response to notices served under the scheme of house-to-house inspection.

The scheme in its entirety has been drafted to meet the exigencies of the district, the exceptionally large area of which has rendered necessary the use of a large number of forms and the free use of the postal facilities of the district. The previously existing connection of each district inspector's house with the telephone system assisted in lessening the difficulties of administration and in meeting the convenience of owners and contractors, intercommunication between various parts of the district and the execution of the work required to be done by the Council under the Act being thereby much facilitated.

The Council, at their meeting held on the 14th of June, 1912, passed the following resolution:—

> "That all matters relating to the exercise and performance by the Council of their duties under the Housing of the Working Classes Act, 1890, and Part. I. of the Housing, Town Planning, &c., Act, 1909, (except the power of raising a rate, borrowing money, or entering into a contract) be delegated to the Health Committee, who shall in due course report to the Council all their proceedings thereunder."

In the case of defaulting landlords the Health Committee have decided to act upon the powers conferred upon them by Section 15 of the Act, the duty of carrying out the necessary work being entrusted to the Surveyor to the Council and his staff.

The four Inspectors specially appointed for the purpose of carrying out the initial steps under the provisions of the Act are allotted certain portions of the district. Each house, if within the specified class, is inspected and duly reported upon on the card system. The inspection of the dwelling-houses within the allotted areas is not strictly confined to the properties falling within the limit of rental prescribed by the Act, and if sanitary defects are found in the houses beyond those limits, they are dealt with under the provisions of the Public Health Act, 1875.

When nuisances of a character requiring immediate abatement are found to exist even on premises where the terms and period of tenancy permit their being dealt with under the Housing, Town Planning, &c., 1909, the inspector serves the owner with a preliminary notice directing his attention to the nuisance and requesting its abatement, in virtue of the powers vested in the Council by the Public Health Act, 1875.

The card upon which the inspector records the particulars relating to each house is comprehensive in character, and contains over 100 items, details of each of which may have to be particularised and entered. It has a reserved space to scale, where the inspector may, if desirable, sketch a plan of the premises showing drainage system and general arrangements. Each evening the inspector forwards to the office the cards upon which the details of inspections made during the day are recorded, together with copies of informal notices served under the Public Health Act, 1875; and of notices to be served under the provisions of the Housing, Town Planning, &c., Act, 1909, all of which are revised by the Chief Inspector before their presentation to the Health Committee.

It is noteworthy, notwithstanding the vigorous manner in which the Act has been enforced in the district, that the inspectors in their initial inspecton have encountered no opposition, except in very rare instances, on the part of either tenant or landlord.

It would be impossible, owing to the lack of space, to give details of the various forms of letters and notices that are in use in carrying out the work ; therefore but a brief summary is appended. All forms, &c., in connection with the scheme are marked on the right-hand corner with H.T.P.A. and numbered consecutively.

No. 1. Letter of instructions to inspector from Medical Officer of Health re area to be inspected.
No. 2. Notice of inspection by Inspector to occupier (Statutory Form No. 1).
No. 3. House-to-house inspection card.
No. 4. Form of informal letter by Inspector to owner.
No. 5. Form accompanying notices to owner to enable him to inform District Inspector as to date of commencing work.
No. 6. Form of report by District Inspector as to result of notices served upon landlords.
No. 7. Statutory Notices.
No. 8. From Medical Officer of Health to District Inspector, that landlord has appealed to the Local Government Board.
No. 9. From District Inspector to Medical Officer of Health re houses vacated and closed.
No. 10. From Medical Officer of Health to landlord re the intention of Council to carry out the work in default of landlord.
No. 10a. From Medical Officer of Health to Surveyor re works required to be executed by the Council.

No. 11. House-to-house Inspector's weekly report, giving summary of inspections carried out, &c.

No. 12. District Inspector's weekly report.

No. 13. Register at Office.

The total number of houses inspected since the operation of the scheme in march of the year under review amounted to 7,683, in 1,990 of which no defects requiring action were found.

The high percentage of defects discovered are attributable to several factors:—(1) The thorough nature of the inspection made.

(2) The properties that have hitherto been inspected are some of the oldest in the district.

(3) The use also made of the powers possessed by the Council under their Private Acts, especially the section in the Act of 1905 relating to the provision of 150 square feet of paved area for each dwelling-house.

(4) The opportunity to deal with structural defects under the provisions of the Housing, Town Planning, &c., Act, 1909.

In the course of the year the Council had occasion to execute the work at the landlord's request in only one instance, but the failure of a small proportion of landlords to comply with the notices will require the intervention of the Council.

In this connection it is satisfactory to note that the various colliery companies, who are owners of considerable house property throughout the district, have without exception responded with commendable promptitud to the call made upon them to execute repairs.

A summary of the inspections made, notices served, and results attained up to the end of 1912 is set forth in the two following tables:—

ousing, Town Planning &c. Act, 1909: Inspections made and Notices served during 1912.

Locality.	Sanitary District.	Ward.	No. of empty houses in inspected area.	No. of houses inspected.	No. of houses in which were found structural defects and nuisances. H.T.P. Act, 1909.	No. of houses in which were found structural defects and nuisances. P.H. Act, 1875.	No. of houses in respect of which preliminary notices were served to execute work and abate nuisances under P.H. Act, 1875.	No. of houses in which no defects requiring action were found.	No. of houses in respect of which notices were served upon occupiers.
laenycwm ..	1	1	—	14	5	7	7	2	4
reherbert ..	1	1	4	675	195	358	358	122	87
wmparc ...	1	2	18	686	193	397	397	96	356
entre ..	2	3	5	612	189	354	354	69	78
lwynypia ..	3	5	2	528	119	294	294	115	32
lydach Vale	3	5	4	583	136	332	332	115	27
onypandy ..	3	5	—	52	6	35	35	11	1
realaw ..	3 4	6	11	728	120	234	234	374	19
enygraig ..	4	7	—	102	56	43	43	3	60
inas ..	4	7	1	236	66	128	128	42	4
ymmer ...	4	8	—	16	3	13	13	—	—
rehafod ..	5	8	3	378	58	190	190	130	12
orth ...	5	8	—	195	46	127	127	22	3
nyshir ..	5	9	7	903	190	412	412	301	155
ylorstown ..	5 6	9	11	997	225	525	525	247	14
aerdy ..	6	10	4	978	198	439	439	341	9
Totals ..			70	7,683	1,805	3 888	3,888	1,990	861

Housing, Town Planning, &c. Act, 1909—Summary of results of notices served during 1912.

LOCALITY.	Sanitary District	Ward.	No. of houses in respect of which preliminary notices were satisfactorily complied with		No. of houses in respect of which notices were not complied with.			No. of houses reported to Committee as requiring Statutory Notices.			No. of houses in respect of which Statutory Notices were satisfactorily complied with.			No. of houses which th owners elected t close instead of complying with notices.	
			P.H. Act, 1875.		H.T.P. Act, 1909.	P.H. Act 1875.		H.T.P. Act, 1909.	P.H. Act 1875.		H.T.P. Act, 1909.	P.H. Act 1875.		HTP Act, 1909	P.H. Act, 1875
			Owner	Occupier.		Owner	Occupier		Owner.	Occupier.		Owner.	Occupier		
Blaenycwm	1	1	2	—	1	1	2	5	5	4	4	4	2	—	—
Treherbert...	1	1	63	—	52	114	43	118	142	87	143	181	44	—	—
Cwmparc ...	1	2	26	191	178	334	143	193	239	165	15	37	22	—	—
Pentre ...	2	3	62	23	111	177	29	189	286	55	78	115	26	—	—
Llwynypia...	3	5	14	—	71	170	—	119	269	1	48	110	32	—	—
Clydach Vale	3	5	5	12	130	294	12	136	327	15	6	33	3	—	—
Tonypandy	3	5	4	—	1	4	—	6	31	—	5	27	1	—	—
Trealaw	3 4	6	22	—	32	67	—	90	212	8	88	145	19	—	—
Penygraig...	4	7	3	2	56	40	58	56	40	58	—	—	—	11	7
Dinas ...	4	7	2	1	58	95	—	66	126	3	8	31	3	1	6
Cymmer ...	4	8	—	—	3	13	—	3	13	—	—	—	—	—	—
Trehafod ...	5	8	12	—	42	110	3	58	127	12	16	68	9	—	—
Porth ...	5	8	1	—	41	106	2	46	121	3	5	20	1	—	2
Ynyshir ...	5	9	22	48	181	336	103	190	208	107	9	54	4	—	—
Tylorstown	5 6	9	7	3	145	363	4	225	348	11	80	155	7	—	—
Maerdy ...	6	10	6	—	76	210	—	173	377	—	122	223	9	—	—
TOTALS...			251	280	1178	2434	399	1673	2871	529	627	1203	182	12	15

The following table sets out in detail the amount of work executed and nuisances abated as a result of the house-to-house inspection carried out under the provisions of the Housing, Town Planning, &c., Act, 1909. Much care has been exercised in the preparation of the table, but a considerable amount of grouping of similar defects has of necessity been adopted.

House-to-House Inspection.—Work Executed under the Housing, Town Planning, &c., Act, 1909

	Ward 1	Ward 2	Ward 3	Ward 5	Ward 6	Ward 7	Ward 8	Ward 9	Wd. 10	Totals.
1.—Baths and Lavatories	1	...	...	...	...	...	...	...	...	1
2.—Slop Sinks	...	...	...	...	...	...	..	...	...	...
3.—Water Closet:—										
(a) Provision of New Closet	3	...	7	2	2	5	...	...	...	19
(b) Conversion into Water Closet	...	...	..	2	...	...	...	...	...	2
(c) Walls, roofs, doors, floors, seats, etc. repaired	257	75	172	89	24	15	10	44	89	775
(d) Flushing Cisterns repaired	62	14	65	30	91	17	47	66	110	502
(e) New Flushing Cisterns provided	194	77	80	18	14	9	21	9	21	443
(f) Soil-pipes repaired	...	...	1	...	1	1	...	...	...	3
(g) Filthy W.C.	...	5	2	3	...	...	...	1	...	11
(h) Pans renewed	20	30	35	41	14	15	4	26	28	213
4.—House:—										
(a) External walls, roofs, chimney stacks, doors, and windows repaired	308	94	220	141	59	33	13	90	160	1118
(b) Internal walls, doors, floors, (I.) boarded, (II.) paved, skirting, stairs, plastering, fireplaces and mantelpieces repaired	282	93	194	140	94	28	25	142	205	1203
(c) Dampness abated by removal of earth ...	21	6	11	...	6	...	1	2	...	47
(d) Bedrooms ventilated	198	132	106	..	4	...	3	19	6	468
(e) Windows made openable	96	16	44	...	4	9	...	2	2	173
(f) Pantry provided	...	...	...	...	...	...	...	...	...	...
(g) Boundary Walls (I.) new	1	1	1	..	...	...	1	4	10	23
(II.) repaired	162	13	112	56	6	...	...	14	34	397
5.—Drains:—										
(a) Lip trap to stoneware syphon gully trap ...	16	25	38	38	33	13	5	12	...	180
(b) Ventilation shaft repaired	20	7	26	3	4	4	...	4	...	68
(c) Defective Drainage	5	...	3	...	...	2	...	...	...	10
(I.) Choked W.C.	11	5	8	2	3	...	1	13	2	45
(II.) Choked Gully Trap	1	1	1	..	2	...	1	...	1	7

(*Continued on next page*).

House-to-House Inspection—(*continued*).

	Ward 1	Ward 2	Ward 3	Ward 5	Ward 6	Ward 7	Ward 8	Ward 9	Wd. 10	Totals.
(III.) Choked disconnecting trap	...	...	...	...	2	...	...	3	1	6
(IV.) Broken, leaky, or otherwise defective drain	24	22	14	15	8	7	2	25	18	135
6.—Area :—										
(a) Areas repaired	12	26	99	130	101	3	64	221	129	785
(b) Areas repaired and extended										
(I.) To less than 150 square feet	105	...	12	40	2	24	...	...	...	183
(II.) To 150 square feet or more	197	84	106	16	24	5	...	9	...	441
(c) Retaining Walls										
(I.) Rebuilt	1	4	8	8	1	5	...	...	...	27
(II.) Repaired	24	4	...	39	1	20	...	5	4	97
(d) Steps repaired	57	22	6	1	26	1	...	26	14	153
7.—Shoots and down spouts repaired or fixed anew ...	183	91	188	120	2	10	21	118	93	826
8.—Dilapidated structures removed	11	84	15	2	...	...	...	6	...	118
9.—Passages paved and drained	...	...	...	...	...	...	...	2	4	6
10.—Drains ventilated	...	...	...	1	...	7	...	...	...	8
11.—Waste pipe disconnected	11	11	...	1	...	...	...	...	...	23
12.—Dampness abated	247	65	90	101	137	14	12	123	219	1008
13.—Dirty houses cleaned	6	14	8	...	...	...	1	1	...	30
14.—Overcrowding (a) by one family	1	8	...	...	...	...	1	...	...	10
(b) by one family and lodgers ...	10	9	2	3	...	7	1	...	...	32
(c) by more than one family ...	3	...	...	3	2	...	...	3	...	11
15.—Animals as a nuisance	19	86	11	...	5	...	...	2	...	126
16.—Fowl and pigeon cots (a) disposed of	1	...	...	10	4	...	4	3	...	22
(b) removed beyond 10 feet from the house	48	25	32	13	4	5	3	31	...	161
17.—Accumulation of manure removed	...	...	...	...	...	...	...	...	...	...
18.—Accumulation of refuse removed	10	2	2	3	...	...	...	7	...	24
19.—Coal on back area removed	7	170	19	...	...	...	...	57	...	253
TOTALS ..	2635	1321	1743	1071	680	259	241	1090	1150	10,190

SHOPS ACT, 1912.

In the course of the year 1912, the Acts relating to shop hours and employment in shops which were previously in force were consolidated in the Shops Act, 1912, which came into operation on the first day of May of that year. The Council made preparations for the administration of the provisions of the Act by the appointment of two whole-time inspectors in the persons of Inspectors Thos. Osborne and Richard Thwaites, both of whom possess certificates qualifying them to act as sanitary and meat inspectors. Seven approved orders affecting various trades have been framed under this and previous Acts, but up to the time of writing considerable difficulty has been experienced in securing approximate uniformity in the orders affecting the various portions of the district. The existing diversity necessarily results in the imposition of hardships upon individual traders, especially about the line of division between two adjacent areas possessing different orders. The difficulty of administration is also increased by the confusion arising from these differences.

The two inspectors carried out detailed inquiries at each of the 2,779 shops which were found to exist in the district at the time of the inquiry, and a register was prepared from the information so obtained. After allowing the tradesmen concerned an interval to enable them to accommodate themselves to the changed conditions, it was found necessary in the interests of the many to take action in the local courts for infringements of the provisions of the Act in 29 instances before the end of the year. Most of the offences committed were against the requirement to close at a certain hour each day, but six other kinds of provisions were trangressed, and the offenders to the extent above stated were taken to court.

The details of the information recorded by the two inspectors is summarised in the following table;—

out the Rhondda Urban District.

TRADE.	Total Number of Shops.	Number of Assistants employed. Males. Under 18	Number of Assistants employed. Males. Over 18	Number of Assistants employed. Females. Under 18	Number of Assistants employed. Females. Over 18	WEEKLY HALF-HOLIDAY. Shops. Monday	WEEKLY HALF-HOLIDAY. Shops. Tuesday	WEEKLY HALF-HOLIDAY. Shops. Wednesday	WEEKLY HALF-HOLIDAY. Shops. Thursday	WEEKLY HALF-HOLIDAY. Shops. Friday	WEEKLY HALF-HOLIDAY. Shops. Saturday	WEEKLY HALF-HOLIDAY. Shops. Exempt.	WEEKLY HALF-HOLIDAY. Assistants. Monday	WEEKLY HALF-HOLIDAY. Assistants. Tuesday	WEEKLY HALF-HOLIDAY. Assistants. Wednesday	WEEKLY HALF-HOLIDAY. Assistants. Thursday	WEEKLY HALF-HOLIDAY. Assistants. Friday	WEEKLY HALF-HOLIDAY. Assistants. Saturday	Whether subject to Local Closing Order.	Legal Action Taken.
Bazaars and Fancy Dealers	24	—	—	11	17	—	—	—	24	—	—	—	—	—	—	28	—	—	No	—
Boot and Shoe Dealers, Makers, and Repairers ..	189	35	75	1	12	—	—	—	189	—	—	—	—	—	—	123	—	—	Partly	1
Butchers	211	49	124	2	5	—	—	—	—	—	—	211	164	5	—	10	—	1	Partly	1
Chemists, Herbalists, and Drug Stores	34	8	25	1	8	—	—	—	—	—	—	34	—	1	1	40	—	—	No	—
Confectioners, Bread, and Bakehouses	134	—	—	6	36	—	—	—	—	—	—	134	—	8	8	24	2	—	No	5
Dairy Products, and Milkshops	14	—	—	—	—	—	—	—	—	—	—	14	—	—	—	—	—	—	No	2
Drapers and Hosiers	184	21	60	102	190	—	—	—	184	—	—	—	—	—	—	373	—	—	Partly	1
Fried Fish and Chip Shops	93	—	—	3	12	—	—	—	—	—	—	93	—	3	7	5	—	—	No	—
Furniture, Musical Instruments, and Sewing Machine Dealers	43	3	25	2	8	—	—	—	43	—	—	—	—	—	—	38	—	—	Partly	—
Greengrocers, Fruiterers, and Florists	251	6	9	8	30	—	—	—	—	—	—	251	3	8	19	23	—	—	No	1
Grocers and Provision Merchants	292	125	421	11	50	—	—	—	292	—	—	—	—	1	—	606	—	—	Partly	7
Hairdressers	129	42	37	1	—	—	—	—	129	—	—	—	—	—	—	80	—	—	Yes	—
Hardware, Chinaware, Tinware, Paper, Paint and Oil Vendors	53	—	—	—	5	—	—	—	53	—	—	—	—	—	—	5	—	—	No	—
Ironmongers, Plumbers, Gas, Water and Sanitary Fittings Dealers	53	10	36	1	3	—	—	—	51	—	2	—	—	—	—	48	—	2	Partly	2
Milliners and Dressmakers	33	—	—	4	12	—	—	—	33	—	—	—	—	—	—	16	—	—	Partly	—
Newsagents and Tobacconists	73	1	3	5	12	—	—	—	—	—	—	73	—	—	2	19	—	—	No	1
Photographers and Picture Framers	16	—	2	1	1	—	—	—	13	3	—	—	—	—	—	2	2	—	No	—
Refreshment Houses and Temperance Bars ..	59	7	14	—	—	—	—	—	—	—	—	59	1	5	4	6	5	—	No	2
Restaurants, Cooked Meats, Coffee Rooms, and																			No	—
Oyster Bars	27	—	2	2	23	—	—	—	—	—	—	27	—	6	8	11	2	—	No	
Retailers of Intoxicating Liquors	127	—	39	6	133	—	—	—	—	—	—	127	1	30	71	58	18	—	No	—
Stationers and Booksellers	19	—	—	—	3	—	—	—	18	—	1	—	—	—	—	3	—	—	No	—
Sweet Shops	518	1	—	2	2	—	—	—	—	—	—	518	—	—	—	3	—	—	No	—
Tailors, Clothiers, and Outfitters	121	27	69	4	7	—	—	—	121	—	—	—	—	—	—	5	—	—	Partly	—
Watchmakers and Jewellers	35	1	11	—	—	—	—	—	35	—	—	—	—	—	—	107	—	—	Yes	3
Miscellaneous	47	7	12	—	—	1	—	—	45	—	1	—	—	—	—	12	—	—	No	3
	2779	343	964	173	569	1	—	—	1230	3	4	1541	169	67	120	1661	29	3		29

EMPLOYMENT OF CHILDREN'S ACT, 1903

Bye-laws under this Act were framed by the Council and received the sanction of the then Home Secretary in 1907. The Act and the bye-laws made thereunder are being administered in the Rhondda by the Police Authorities of the County of Glamorgan, all prosecutions found necessary being instituted and conducted by the Clerk to the Council.

FACTORY AND WORKSHOP ACT, 1901.

Section 132 of this Act, which became operative on January 1st, 1902, requires that:—"The Medical Officer of Health of every District Council shall, in his annual report to them, report specifically on the administration of this Act in workshops and workplaces, and he shall send a copy of his annual report, or so much of it as deals with this subject, to the Secretary of State."

The number of workshops distributed throughout the district amounts to 1,247, or 32 more than in the previous year. As will be seen from the appended table, the trades carried on are such as are incidental to any large community, and the workshops, though numerous, are small. The total number of persons engaged is, however, considerable, and it is hoped that some of the time of certain of the inspectors now engaged by the Council may be devoted to a more frequent and methodical inspection of the workshops and workplaces throughout the district, so as to assist in rendering the conditions under which the persons employed on these premises as favourable as possible to the maintenance of health. For the purpose of promoting this end, cards have been designed on which may be recorded the circumstances ascertainable by a systematic inspection of each workshop or workplace. Given exact information thus obtained, the objectionable conditions existing can be fully appreciated and the necessary steps towards their removal or amelioration can be taken.

All plans for new workshops come before the Surveyor's and Medical Officer's Departments before being submitted to the appropriate Committees for consideration, and adequate and suitable sanitary accommodation is required in all cases.

The 160 bakehouses in the district are, generally speaking, small and, with few exceptions, each gives employment to only one or two persons. Underground bakehouses, in the full sense of the term, do not exist throughout the urban area. There are practically no outworkers engaged in the district.

Workshops and Workplaces in the Rhondda in Wards

	1	2	3	4	5	6	7	8	9	10	Total.
Bootmakers ...	16	13	26	14	14	25	13	14	14	14	163
Bakers ..	15	23	17	12	17	12	15	16	14	21	162
Blacksmiths ...	2	1	3	1	2	2	3	3	3	2	22
Barbers ...	12	14	13	9	13	17	11	15	19	12	135
Basket-Makers ...	—	—	—	—	—	1	—	—	—	—	1
Carpenters ..	9	7	10	9	7	9	6	9	9	10	85
Fried Fish Shops .	13	13	14	11	8	18	9	11	14	7	118
Coachmakers ...	1	—	1	—	1	3	2	1	1	—	10
Cycle Repairers ...	1	1	1	1	1	1	—	1	—	—	7
Dressmakers ...	26	30	22	18	14	22	5	15	20	25	197
Dressmakers and Milliners (Comb.)	1	1	3	—	1	—	—	3	3	3	15
Glaziers ...	2	2	3	2	—	2	—	1	2	1	15
Jewellers ...	5	5	4	2	1	6	1	4	3	5	36
Milliners ...	13	11	13	5	8	7	7	4	6	6	80
Knitters ..	—	—	—	—	—	—	—	—	—	—	—
Picture Framers ...	—	2	4	3	2	—	—	—	—	1	12
Printers ...	1	1	1	—	—	—	—	2	—	1	6
Plumbers ...	1	3	3	2	2	1	1	3	—	3	19
Saddlers ...	2	1	1	—	—	1	1	2	—	2	10
Monumental Masons...	—	3	—	—	—	3	—	—	2	1	9
Sweet Makers ...	1	—	1	1	—	—	—	—	—	—	3
Tailors ...	9	10	22	5	4	6	4	5	5	6	76
Tinmen ...	—	1	1	—	1	1	—	2	1	1	8
Quarries ...	5	5	4	9	5	6	6	3	9	6	58
Total ...	135	147	167	104	101	143	84	114	125	127	1247

APPENDIX.

Table 1.

Population of the Rhondda Valley since 1801.

Year.	Houses			Persons.			Persons per House.
	In-habited.	Unin-habit-ed.	Build-ing.	Males	Females.	Total.	
*a*1801				265	277	542	
1811				283	293	576	
1821				309	338	647	
1831				277	265	542	
1841				386	362	748	
1851				493	458	951	
1861	561	107	5	1,669	1,366	3,035	5·4
1871	2,710	32	62	9,559	7,355	16,914	6·2
*b*1871						23,950	
1881	9,193	340	158	30,877	24,755	55,632	6·0
1891	13,551	146	374	50,174	38,177	88,351	6 5
1901	19,210	368	112	62,315	51,420	113,735	5·92
1911				83,209	69,572	152,781	
1912						**157,951**	

NOTES.

(*a*) The census returns for 1801 include Rhigos, which is not within the present area of the Rhondda District.

(*b*) Portions of the Llanwonno and Llantrisant Districts were added to the Rhondda District on October 1st, 1879.

The Registrar-General estimated the population in the enlarged area in 1871 at 23,950.

Table 1a.

Showing the Populations of the ten Wards at the 1901 and 1911 Censuses.

	1901.			1911.				
	Persons.	Males.	Females.	Persons.	Males.	Females.	Increase 1901-11	Percentage rate of Increase.
Ward 1	8,826	4,744	4,082	13,483	7,365	6,118	4,657	52·8
,, 2	11,446	6,294	5,152	16,186	8,844	7,342	4,740	41·4
,, 3	10,022	5,360	4,662	11,998	6,423	5,575	1.976	19·7
,, 4	9,594	5,265	4,329	11,581	6,226	5,355	1,987	20·7
,, 5	12,191	6,583	5,608	15,260	8,307	6,953	3,069	25·2
,, 6	10,172	5,515	4,657	14,343	7,701	6,642	4,171	41·0
,, 7	9,264	4,916	4,348	11,532	6.027	5,505	2,268	24 5
,, 8	13,605	7,464	6,141	17,198	9,382	7,816	3,593	26·4
,, 9	13,264	7,405	5.859	23,042	12,678	10,364	9,778	73·7
,, 10	15,351	8,769	6,582	18,158	10,256	7,902	2,807	18·3
Rhondda	**113,735**	**62,315**	**51,420**	**152,781**	**83,209**	**69,572**	**39,046**	**34·3**

Table 1b.

Showing the population, &c., in 1901 and 1911, of the Pontypridd Registration District of which the Rhondda Urban District is a part.

Registration Districts, Sub-districts, and Civil Parishes.	Area in Acres.	Families or Separate Occupiers.		Population.			
		1901.	1911.	1901.	1911.		
				Persons.	Persons.	Males.	Females.
PONTYPRIDD (589) ..	75,387	39,384	55,717	204,824	288,564	155,972	132,592
1. EGLWYSILAN ..	18,953	5,970	9,606	30,191	49,765	27,064	22,701
Eglwysilan ..	10,242	2,369	5,001	11,800	26,313	14,472	11,841
Llanfabon ..	4,184	769	1,242	4,035	6,531	3,529	3,002
Llanwonno (part of)	540	73	70	316	365	183	182
Pontypridd (part of)	3,987	2,759	3,293	14,040	16,556	8,880	7,676
2. LLANWONNO ..	14,531	9,849	13,043	51,494	67,094	36,012	31,082
Llanwonno (part of)	9,964	5,872	8,074	30,777	41,881	22,455	19,426
Pontypridd (part of)	1,920	1,654	1,812	8,463	8,833	4,569	4,264
Rhondda (part of) ..	2,647	2,323	3,157	12,254	16,380	8,988	7,392
3. LLANTRISANT ..	22,463	6,652	9,834	34,171	50,929	27,061	23,868
Llantrisant ..	14,209	2,083	2,984	10,090	15,048	7,894	7,154
Llantwit Fardre ..	4,223	349	460	1,755	2,434	1,255	1,179
Pontypridd (part of)	2,233	1,837	3,353	9,813	17,822	9,526	8,296
Rhondda (part of) ..	1,798	2,383	3,037	12,513	15,625	8,386	7,239
4. RHONDDA							
Rhondda ..	**19,440**	**16,913**	**23,234**	**88,968**	**120,776**	**65,835**	**54,941**

Table 2.

Rateable and Assessable Values of the Rhondda Urban District.

I am indebted to Mr. John Hopkins, Accountant to the Council, for the following statement:—

Year ending 31st March.	Rateable Value. £	s.	d.	Assessable Value. £	s.	d.	General District Rate in the £ per annum. s.	d.
1896	409,807	2	6	341,050	13	11	2	6
1897	443,290	0	0	371,927	4	7	2	6
1898	451,977	5	0	379,042	3	9	2	6
1899	462,354	1	6	387,533	3	6	2	6
1900	463,387	12	6	387,549	19	9	2	9
1901	490,352	15	0	413,620	18	4	2	9
1902	481,521	10	0	404,692	18	4	3	0
1903	539,336	15	0	464,698	15	5	3	0
1904	515,731	0	0	444,285	10	0	3	8
1905	527,210	5	0	453,629	0	0	3	2
1906	520,041	10	0	441,745	1	8	3	0
1907	534,772	15	0	455,087	5	0	3	0
1908	569,169	10	0	486,645	16	8	3	3
1909	622,832	10	0	540,429	15	10	3	6
1910	646,069	0	0	561,456	7	11	3	3
1911	643,471	0	0	556,621	5	10	3	3
1912	617,992	15	0	545,344	12	6	3	3
1913	616,381	15	0	541,432	14	7	3	6

A penny rate on the Assessable Value produces £2,255 19s. 5d. (Gross).

An analysis of the Rateable values of the houses in the District gives the following result:—

£100 and upwards	.47
Between £50 and £100	.51
,, £25 and £50	2.26
,, £10 and £25	31.03
Below £10	65.73
	100.00

Table 3.

Showing the actual number of Births in the Rhondda, and the Birth-rates during the years 1892—1912.

Year.	Total Births.	Birth-rate per 1,000	Average of Ten Years.
1892	3,916	42.9	40.8
1893	4,149	44.3	
1894	3,715	38.7	
1895	4,245	43.1	
1896	4,328	42.9	
1897	4,109	39.7	
1898	4,120	38.8	
1899	4,089	37.5	
1900	4,469	40.0	
1901	4,586	40.0	
1902	4,937	41.8	37.9
1903	4,897	40.3	
1904	4,860	38.8	
1905	4,664	36.2	
1906	4,751	35.8	
1907	4,831	35.3	
1908	5,454	38.7	
1909	5,577	38.4	
1910	5,628	37.7	
1911	5,491	35.7	
1912	**5,236**	**33.1**	

Table 4.

Comparative Birth-rate Table for 1912.

	Birth-rate per 1,000
England and Wales	23.8
Rural England and Wales	22.5
95 Great Towns	24.9
146 Smaller Towns	23.8
Rhondda	**33.1**

Table 5.

The number of houses, estimated population, number of births, and birth-rate per 1,000 for each Ward.

Ward.	Number of occupied houses.	Estimated population to middle of 1912.	Number of Births.	Birth-rate per 1,000.
1	2,392	14,202	470	33.1
2	2,836	16,687	534	32.0
3	2,156	12,116	369	30.5
4	2,129	12,218	403	33.0
5	2,664	15,551	515	33.1
6	2,493	14,759	495	33.5
7	2,288	11,914	401	33.7
8	3,412	17,493	561	32.1
9	3,908	23,897	833	34.9
10	3,115	19,114	621	32.5
Inward Transfers			34	.2
Rhondda	**27,393**	**157,951**	**5,236**	**33.1**

Table 6.

Showing the number of Illegitimate Births in the Rhondda.

In 1895 there was a number equivalent to 26 per 1,000 of total births.
,, 1896 ,, ,, 24 ,, ,,
,, 1897 ,, ,, 23 ,, ,,
,, 1898 there were 105, equal to 25 per 1,000 of total births
,, 1899 ,, 75, ,, 18 ,, ,,
,, 1900 ,, 111, ,, 24 ,, ,,
,, 1901 ,, 97, ,, 21 ,, ,,
,, 1902 ,, 97, ,, 15 ,, ,,
,, 1903 ,, 115, ,, 23 ,, ,,
,, 1904 ,, 100, ,, 20 ,, ,,
,, 1905 ,, 100, ,, 21 ,, ,,
,, 1906 ,, 101, ,, 21 ,, ,,
,, 1907 ,, 107, ,, 22 ,, ,,
,, 1908 ,, 119, ,, 22 ,, ,,
,, 1909 ,, 130, ,, 23 ,, ,,
,, 1910 ,, 121, ,, 21 ,, ,,
,, 1911 ,, 136, ,, 25 ,, ,,
,, **1912** ,, **160,** ,, **31** ,, ,,

Table 7.

Number of Births, Birth-rate, number of deaths of children under one year of age, Infantile Mortality-rate, number of Deaths, and Death-rate in each year since 1891.

YEAR.	Total Number of Births.	General Birth-rate per 1,000.	Number of deaths of children under one year of age.	Infantile Mortality-rate per 1,000 births.	Total Number of Deaths.	General Death-rate per 1,000.
1891	3,935	44·3	862	219	2,255	25·4
1892	3,916	42·9	757	193	1,804	19·8
1893	4,149	44·3	932	225	2,132	22·8
1894	3,715	38·7	757	204	1,706	17·7
1895	4,245	43·1	997	235	2,246	22·8
1896	4,328	42·9	855	198	2,105	20·8
1897	4,109	39·7	838	204	2,049	20·1
1898	4,120	38·8	793	192	1,979	18·8
1899	4,089	37·5	1,016	248	2,419	22·4
1900	4,469	40·0	839	188	2,181	19·9
1901	4,586	40·0	1,020	222	2,431	21·2
1902	4,937	41·8	883	179	2,190	18·6
1903	4,897	40·3	778	159	1,998	16·4
1904	4,860	38·8	925	190	2,345	18·7
1905	4,664	36·2	927	199	2,402	18·6
1906	4,751	35·8	821	173	2,074	15·6
1907	4,831	35·3	782	162	2,133	15·6
1908	5,454	38·7	1,002	184	2,516	17·9
1909	5,577	38·4	724	130	2,231	15·4
1910	5,628	37·7	770	137	2,181	14·6
1911	5,491	35·7	902	164	2,352	15·3
1912	**5,236**	**33·1**	**666**	**127**	**2,182**	**13·8**

Table 8.

Showing the number of houses, estimated population, number of deaths, and death-rate per 1,000 for each Ward.

Wards.	Number of occupied houses	Estimated population to middle of 1912.	Number of deaths from all causes.	Death-rate per 1,000.
1	2,392	14,202	174	12.3
2	2,836	16,687	208	12.5
3	2,156	12,116	147	12.1
4	2,129	12,218	187	15.3
5	2,664	15,551	201	12.9
6	2,493	14,759	183	12.4
7	2,288	11,914	170	14.3
8	3,412	17,493	269	15.4
9	3,908	23,897	362	15.2
10	3,115	19,114	281	14.7
Rhondda	**27,393**	**157,951**	**2,182**	**13.8**

Table 9.

Death-rates in the 95 Great Towns of England and Wales, 1912, based upon the estimated populations at Midsummer, and compiled from the four quarterly returns of the Registrar-General.

	Town	Death-rate.		Town	Death-rate.
1	Ilford	7·5	49	London	13·6
2	Southend-on-Sea	8·9	50	Bury	13·7
3	Wimbledon	9·1	51	Cardiff	13·7
4	Hornsey	9·5	52	Wakefield	13·7
5	Ealing	9·6	53	Aberdare	13·8
6	Eastbourne	9·7	54	Barnsley	14·0
7	Enfield	9·7	55	Birmingham	14·1
8	Gillingham	9·7	56	West Ham	14·1
9	Walthamstow	9·8	57	Blackburn	14·2
10	Bournemouth	9·9	58	Newcastle-on-Tyne	14 2
11	Edmonton	10·0	59	Leeds	14·2
12	Willesden	10·1	60	Sheffield	14.2
13	Swindon	10·3	61	Barrow-in Furness	14·3
14	Acton	10·4	62	Birkenhead	14·3
15	East Ham	10·4	63	Bradford	14 3
16	Croydon	10·6	64	Warrington	14·3
17	Leyton	10·6	65	West Bromwich	14·3
18	Wallasey	11·0	66	Dudley	14·4
19	Devonport	11·1	67	Hull	14·4
20	Reading	11·1	68	Nottingham	14 5
21	Tottenham	11·1	69	West Hartlepool	14·5
22	Cambridge	11·3	70	Rochdale	14·6
23	Oxford	11·7	71	Stockport	14·6
24	Smethwick	11·8	72	Burnley	14·7
25	Coventry	11·9	73	Halifax	14·7
26	Northampton	12·0	74	Great Yarmouth	14 8
27	Darlington	12·1	75	Plymouth	14·9
28	Derby	12·1	76	Ipswich	15·0
29	Grimsby	12·3	77	Stockton-on-Tees	15·0
30	Lincoln	12·4	78	St. Helens	15·1
31	Blackpool	12·5	79	Walsall	15·1
32	Hastings	12·6	80	Dewsbury	15·2
33	Brighton	12·7	81	Gateshead	15·4
34	Newport (Mon.)	12·7	82	Wigan	15·5
35	Norwich	12·7	83	South Shields	15·6
36	Southport	12·7	84	Tynemouth	15·6
37	Bath	12·8	85	Merthyr Tydfil	15 7
38	Portsmouth	12·9	86	Rotheram	15 7
39	Southampton	13·0	87	Bootle	15·8
40	Swansea	13·3	88	Stoke-on-Trent	15·9
41	Bristol	13.4	89	Sunderland	15·9
42	Leicester	13 4	90	Manchester	16·0
43	Wolverhampton	13·4	91	Oldham	16·1
44	York	13·4	92	Salford	16·5
45	Bolton	13·5	93	Preston	16 6
46	**Rhondda..**	**13·5**	94	Middlesbrough	17·2
47	Gloucester	13 6	95	Liverpool	18·2
48	Huddersfield	13·6			

Table 10.

Rates of Mortality in the Rhondda of Children under one year of age from the principal infantile diseases per 1,000 births during 1902-12.

Cause of Death.	1902		1903		1904		1905		1906		1907		1908		1909		1910		1911		1912	
	Total Deaths.	Rate per 1,000 Births.	Total Deaths.	Rate per 1,000 Births.	Total Deaths.	Rate per 1,000 Births.	Total Deaths.	Rate per 1,000 Births.	Total Deaths.	Rate per 1,000 Births.	Total Deaths.	Rate per 1,000 Births.	Total Deaths.	Rate per 1,000 Births.	Total Deaths.	Rate per 1,000 Births.	Total Deaths.	Rate per 1,000 Births.	Total Deaths.	Rate per 1,000 Births.	Total Deaths.	Rate per 1,000 Births.
All Causes ..	883	178	778	158	925	190	927	199	828	174	782	162	1002	184	724	130	770	137	902	164	666	127
Diarrhœa ..	52	10	88	17	173	35	148	31	161	34	123	25	271	50	99	18	94	17	246	45	32	6
Debility ..	153	30	107	21	146	30	148	31	147	31	131	27	116	21	131	23	114	20	100	18	133	25
Convulsions ..	171	34	130	26	123	25	14	30	82	17	109	23	113	21	82	15	94	17	105	19	65	12
Lung Diseases (except Tubercular)	192	38	134	27	150	30	197	42	153	32	177	37	177	32	116	21	146	26	102	19	181	35
Premature Birth	53	10	84	17	69	14	62	13	69	15	68	14	88	16	93	17	85	15	85	15	87	17
Dentition ..	34	6	35	7	23	4	23	5	8	2	8	2	9	2	8	1	10	2	—	—	—	—
Whooping Cough	21	4	27	5	25	5	22	5	13	3	19	4	34	6	17	3	25	4	8	1	42	8
Tubercular Diseases.	20	4	12	2	18	3	27	6	17	4	12	3	15	3	12	2	9	2	14	3	8	2
Measles ..	38	7	2	0·4	32	6	24	5	8	2	21	5	28	5	9	2	11	2	34	6	22	4

Table 11.

Deaths under one year of age in the different Wards during 1912, from the following diseases:—

Cause of Death.	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5	Ward 6	Ward 7	Ward 8	Ward 9	Ward 10
Measles	3	2	4	2	—	—	—	4	5	2
Scarlet Fever ...	—	—	—	—	—	—	—	—	—	—
Whooping Cough ...	—	6	1	4	5	2	1	1	7	15
Diphtheria	—	—	—	—	—	—	1	—	1	—
Membranous Croup ...	—	—	—	—	—	—	—	—	—	—
Epidemic Influenza ...	—	—	—	—	—	—	—	—	1	—
Diarrhœa	4	1	1	3	3	8	1	1	4	6
Erysipelas	—	—	—	—	—	—	—	—	—	—
Accidents (General) ...	—	1	—	2	1	2	—	—	1	2

Table 12.

Showing the number of deaths in the Rhondda from the principal Zymotic Diseases since 1892.

Year	Small-Pox.	Measles.	Scarlet Fever.	Whooping Cough.	Diptheria.	Fevers.			Diarrhœa.	Total Zymotic Deaths.	Zymotic Death-rate.	Average Zymotic Death-rate of Ten Years.
						Typhus	Enteric.	Simple Continued				
1892	-	44	43	19	20	-	32	—	46	204	2·2	3·4
1893	1	43	23	12	30	-	91	1	85	286	3·0	
1894	-	13	12	30	29	-	28	—	28	140	1·4	
1895	-	79	27	72	66	-	25	—	75	344	3·4	
1896	-	38	43	63	54	-	28	3	144	373	3·6	
1897	-	138	19	52	78	-	28	—	61	376	3·6	
1898	-	16	14	33	146	-	40	1	105	355	3·3	
1899	-	--	10	70	186	-	55	—	169	489	4·4	
1900	-	121	35	58	125	-	24	—	118	481	4·3	
1901	-	3	43	33	135	-	53	—	327	595	5·2	
1902	1	109	27	40	81	-	21	—	109	389	3·3	2·7
1903	-	8	38	52	42	-	44	—	109	293	2·4	
1904	-	102	20	53	32	-	42	—	211	460	3·7	
1905	-	84	11	55	16	-	15	1	172	354	2·7	
1906	-	24	9	27	25	-	20	—	206	311	2·4	
1907	-	68	9	26	20	-	22	—	147	292	2·1	
1908	-	102	7	54	32	-	21	—	319	535	3·8	
1909	-	47	15	27	35	-	4	—	130	258	1·8	
1910	-	25	24	41	15	-	12	—	115	232	1·6	
1911	-	144	19	18	21	-	18	—	313	533	3·5	
1912	-	**127**	**19**	**80**	**19**	-	**16**	—	**39**	**300**	**1·9**	

Table 13.—Comparing the Death-rates from Zymotic Diseases during the years 1892-1912, in the Rhondda with those of similar Diseases in England and Wales (per 1,000 living).

YEAR.	Small-pox.		Measles.		Scarlet Fever.		Whooping Cough.		Diphtheria		FEVERS.						Diarrhœa.		Total Zymotic Deaths.	Zymotic Death-rate	
											Typhus.		Enteric		Simple con						
	Rhondda.	England and Wales.	Rhondda.	England and Wales.	Rhondda.	England and Wales.	Rhondda.	England and Wales.	Rhondda.	England and Wales.	Rhondda.	England and Wales.	Rhondda.	England and Wales.	Rhondda.	England and Wales.	Rhondda.	England and Wales.	Rhondda	Rhondda.	England and Wales.
1892	—	·01	·48	·46	·47	·19	·20	·45	·21	·22	—	·003	·35	·14	—	·008	·50	·50	204	2·2	2·7
1893	·01	·05	·45	·37	·24	·23	·12	·34	·32	·31	—	·005	·97	·23	·01	·009	·90	·95	286	3·0	3·1
1894	—	·03	·13	·39	·12	·16	·31	·41	·30	·29	—	·004	·29	·16	—	·007	·29	·35	140	1·4	2·2
1895	—	·007	·80	·38	·27	·15	·73	·31	·67	·26	—	·002	·25	·18	—	·005	·76	·87	344	3·4	2·8
1896	—	·02	·37	·57	·42	·18	·62	·43	·53	·29	—	·002	·27	·17	·02	·005	1·42	·55	373	3·6	2·5
1897	—	—	1·33	·10	·18	·14	·50	·31	·75	·24	—	—	·27	·15	—	—	·58	·85	376	3·6	2·1
1898	—	·01	·15	·41	·13	·11	·31	·31	1·37	·24	—	—	·37	·18	·009	—	·98	·96	355	3·3	2·2
1899	—	·01	—	·31	·09	·12	·64	·30	1·70	·29	—	—	·50	·20	—	—	1·55	·98	489	4·4	2·2
1900	—	·01	1·09	·39	·31	·12	·51	·34	1·12	·29	—	—	·21	·17	—	—	1·05	·69	481	4·3	2·0
1901	—	·01	·02	·27	·37	·13	·28	·30	1·18	·27	—	—	·46	·17	—	—	2·85	·91	597	5·2	2·0
1902	·008	·08	·89	·38	·23	·15	·34	·29	·68	·23	—	—	·18	·13	—	—	·92	·38	389	3·3	1·64
1903	—	·02	·06	·27	·31	·12	·42	·27	·34	·18	—	—	·35	·10	—	—	·90	·50	293	2·4	1·46
1904	—	·01	·81	·36	·16	·11	·42	·34	·26	·17	—	—	·34	·09	—	—	1·68	·86	460	3·7	1·94
1905	—	—	·65	·32	·09	·11	·43	·25	·13	·16	—	—	·12	·09	·008	—	1·34	·59	354	2·7	1·52
1906	—	—	·18	·27	·07	·10	·20	·23	·18	·17	—	—	·15	·09	—	—	1·55	·87	311	2·4	1·73
1907	—	—	·50	·36	·07	·09	·19	·29	·14	16	—	—	·16	·07	—	—	1·08	·29	292	2·1	1·26
1908	—	—	·73	·22	·05	·08	·39	·27	·23	·15	—	—	·15	·07	—	—	2·27	·50	535	3·8	1·29
1909	—	—	·33	·35	·10	·09	·19	·20	·24	·14	—	—	·03	·06	—	—	·85	·28	258	1·8	1·12
1910	—	—	·17	·23	·16	·06	·27	·24	·10	·12	—	—	·08	·05	—	—	·77	·29	232	1·6	·99
1911	—	—	·94	·36	·12	·05	·12	·21	·14	·13	—	—	·12	·07	—	—	2·03	1·06	533	3·5	1·88
1912	—	—	·80	·35	·12	·05	·51	·23	·12	·11	—	—	·10	·04	—	—	·25	—	—	1·9	—

Table 14.

Actual number of Deaths from All Causes and from the principal Zymotic Diseases in each Ward during 1912.

Wards.	Population.	All Causes.	Zymotic	Small Pox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Typhoid Fever.	Diarrhœa.
1	14,202	174	15	—	7	1	1	1	—	5
2	16,687	208	29	—	12	4	9	1	2	1
3	12,116	147	26	—	15	1	8	1	—	1
4	12,218	187	28	—	15	2	5	2	1	3
5	15,551	201	24	—	7	3	10	—	1	3
6	14,759	183	16	—	2	1	5	—	—	8
7	11,914	170	17	—	9	1	3	1	1	2
8	17,493	269	36	—	16	3	4	2	9	2
9	23,897	362	56	—	27	1	12	8	2	6
10	19,114	281	53	—	17	2	23	3	—	8
Rhondda	**157,951**	**2,182**	**300**	—	**127**	**19**	**80**	**19**	**16**	**39**

Table 15.

The Death-rate per 1,000 from All Causes and from the principal Zymotic Diseases in the 10 Wards during 1912.

WARDS.	All Causes.	Zymotic.	Small Pox	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Typhoid Fever.	Diarrhœa and Epidemic Enteritis.
1 ..	12·3	1·1	—	·49	·07	·07	·07	—	·35
2 ..	12.5	1·7	—	·72	·24	·54	·06	·12	·06
3 ..	12·1	2·2	—	1·24	·08	·66	·08	—	·08
4 ..	15·3	2·3	—	1·23	·16	·41	·16	·08	·25
5 ..	12·9	1·5	—	·45	·19	·64	—	·06	·19
6 ..	12·4	1·1	—	·14	·07	·34	—	—	·54
7 ..	14·3	1·4	—	·75	·08	·25	·08	·08	·17
8 ..	15·4	2·1	—	·91	·17	·23	·11	·51	·11
9 ..	15·2	2·3	—	1·13	·04	·50	·33	·08	·25
10 ..	14·7	2·8	—	·89	·10	1·20	·16	—	·42
Rhondda	**13·8**	**1·9**	—	**·80**	**·12**	**·51**	**·12**	**·10**	**·25**

Table 16.

Incidence of Notifiable Infectious Diseases in the Administrative County of Glamorgan and in the County Boroughs situated in the County of Glamorgan.

	Population (Census 1911).	Small-pox.		Scarlet Fever		Diphtheria.		Enteric Fever.		Puerperal Fever.		Erysipelas.	
		Cases.	Rate.	Cases.	Rate.	Cases.	Rate.	Cases.	Rate.	Cases.	Rate.	Cases.	Rate.
Administrative County ..	742,998	—	—	3,391	4·56	813	1·09	188	0·25	62	0·08	328	0·44
County Boroughs:—													
Cardiff	182,259	—	—	472	2·59	536	2·94	56	0·31	11	0·06	170	0·93
Merthyr Tydfil ...	80,990	—	—	294	3·63	45	0·56	24	0·30	7	0·09	22	0·27
Swansea	114,663	—	—	299	2·61	223	1·94	11	0·10	4	0·03	26	0·23

Table 17.

Incidence of Notifiable Infectious Diseases in the Boroughs, Urban Districts, and Rural Districts in the County of Glamorgan.

	Population (Census 1911.)	Small pox.		Scarlet Fever.		Diph-theria.		Enteric Fever.		Puer-peral Fever.		Erysi-pelas.	
		Cases.	Rate.	Cases.	Rate.	Cases.	Rate.	Cases.	Rate.	Cases.	Rate.	Cases.	Rate.
oroughs & Urban istricts :—													
Aberavon ...	10,505	–	–	6	0·57	10	0·95	—	—	—	—	8	0·76
Aberdare ...	50,830	–	–	635	12·49	41	0·81	10	0·20	4	0·08	16	0·31
Barry ...	33,763	–	–	60	1·78	44	1·30	25	0·74	1	0·03	28	0·83
Bridgend ...	8,021	–	–	21	2·62	6	0·75	—	—	—	—	1	0·12
Briton Ferry ...	8,472	–	–	15	1·77	3	0·35	1	0·12	4	0·47	—	—
Caerphilly ...	32,844	–	–	245	7·46	54	1·64	5	0·15	9	0·27	12	0·37
Cowbridge ...	1,167	–	–	4	3·43	—	—	—	—	—	—	2	1·71
Gelligaer ..	35,521	–	–	110	3·10	11	0·31	6	0·17	4	0·11	15	0·42
Glyncorrwg ..	8,688	–	–	51	5·87	4	0·46	2	0·23	1	0 12	9	1·04
Maesteg ..	24,977	–	–	18	0·72	23	0·92	1	0·04	—	—	5	0·20
Margam ..	14,713	–	–	17	1·16	65	4·42	1	0·07	—	—	16	1·09
Mountain Ash ...	42,246	–		102	2·41	48	1·14	7	0·17	7	0·17	13	0·31
Neath ...	17,586	–	–	50	2·84	19	1·08	—	—	4	0·23	9	0·51
Ogmore & Garw	26,741	–	–	199	7·44	30	1·12	3	0·11	2	0·07	6	0·22
Oystermouth	6,098	–	–	2	0·33	30	4·92	2	0·33	—	—	4	0·66
Penarth ..	15,488	–	–	39	2·52	13	0·84	2	0·13	—	—	7	0·45
Pontypridd ...	43,211	–	–	168	3·89	32	0·74	7	0·16	2	0·05	15	0·35
Porthcawl ...	3,444	–	–	1	0·29	1	0·29	1	0·29	—	—	—	—
Rhondda ..	**152,781**	–	–	**926**	**6·06**	**205**	**1·34**	**71**	**0·46**	**15**	**0·10**	**76**	**0·50**
Rural Districts :—													
Cowbridge ...	7,935	–	–	38	4·79	9	1·13	—	—	—	—	—	—
Gower ..	8,622	–	–	31	3·60	6	0·70	1	0·12	—	—	2	0·23
Llandaff & Dinas Powis ...	33.200	–	–	68	2·05	64	1·93	13	0·39	3	0·09	16	0·48
Llantrisant and Llantwit Fardre	17,482	–	–	71	4·06	13	0·74	11	0·63	1	0 06	2	0·11
Neath ...	41,613	–	–	154	3·70	41	0·99	8	0·19	2	0·05	10	0·24
Penybont ..	22,324	–	–	244	10·93	13	0·58	4	0·18	1	0·04	21	0·94
Pontardawe ..	31,498	–	–	45	1·43	10	0·32	6	0·19	—	—	27	0·86
Swansea ...	43,228	–		74	1·71	25	0·58	1	0·02	2	0·05	8	0·19

Table 18.

Showing the number of cases, and incidence of the Notifiable Diseases in the Rhondda since compulsory notification was adopted in 1894.

Year.	Cases Notified.	Estimated Population.	Incidence per 1,000 of Population.
1894	625	95,904	6.6
1895	933	98,356	9.5
1896	1,241	100,870	12.3
1897	1,031	103,445	9.9
1898	1,652	106,094	15.6
1899	2,700	108,807	24.8
1900	3,214	111,587	28.8
1901	3,039	114,587	26.5
1902	1,879	118,020	15.9
1903	1,597	121,557	13.1
1904	1,240	125,199	9.9
1905	534	128,951	4.1
1906	779	132,814	5.9
1907	773	136,794	5.7
1908	862	140,894	6.1
1909	1,091	145,116	7.5
1910	1,530	149,464	10.2
1911	1,240	153,775	8.1
1912	1 300	157,951	8.2

Table 19.—Scarlet Fever Notifications in the Ten Wards, 1894-1912.

WARDS.	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	**1912**
1	86	152	46	82	35	12	63	147	72	21	36	26	11	15	53	67	201	38	**59**
2	86	67	40	136	94	56	158	145	33	26	26	15	37	29	120	43	84	286	**196**
3	79	89	24	82	77	23	158	66	92	11	18	26	23	9	15	10	132	112	**42**
4	69	122	90	44	64	12	228	210	46	72	32	17	31	32	59	51	114	124	**76**
5	2	85	200	74	5	26	402	116	22	73	68	1	16	8	61	110	92	49	**171**
6	8	26	203	29	12	13	242	79	21	117	68	36	77	19	11	53	104	26	**72**
7	28	61	76	11	6	25	129	120	39	157	22	6	44	30	45	25	141	62	**65**
8	47	22	202	65	40	47	91	106	241	114	20	19	90	19	36	82	199	66	**146**
9	23	57	86	26	53	224	91	213	94	157	58	29	16	33	37	205	153	117	**68**
10	13	24	6	25	22	96	266	191	173	124	100	28	17	150	70	155	36	17	**31**
Rhondda	**441**	**704**	**973**	**574**	**408**	**534**	**1,828**	**1,393**	**833**	**872**	**448**	**203**	**362**	**346**	**507**	**801**	**1,256**	**897**	**926**

Table 20.—Scarlet Fever cases notified each month in the respective Wards in the Rhondda during 1912.

WARDS.	1		2		3		4		5		6		7		8		9		10		Monthly Total.	
Cases.	Cases Notified.	Primary Cases.	Cases Notified	Primary Cases.	Cases Notified	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified	Primary Cases.	Cases. Notified.	Primary Cases.	Cases. Notified.	Primary Cases.
January ...	2	2	44	34	1	1	4	4	13	11	2	2	1	1	4	3	17	13	3	3	91	74
February ...	3	2	23	17	4	4	1	1	11	11	3	3	1	1	5	4	7	5	3	2	61	50
March ...	—	—	19	13	—	—	3	3	15	12	1	1	2	2	9	6	8	7	2	2	59	46
April ...	1	1	8	5	1	1	7	4	14	13	4	4	11	7	4	3	6	6	—	—	56	44
May ...	—	—	4	4	1	1	3	2	8	6	15	8	5	4	9	7	3	2	4	4	52	38
June ...	7	7	23	16	2	2	10	8	13	9	8	6	3	3	5	5	3	3	—	—	74	59
July ...	8	7	21	15	4	3	5	4	9	7	2	2	4	3	13	9	3	3	2	2	71	55
August ...	8	7	16	13	3	2	5	3	15	10	16	8	4	4	4	3	2	2	2	2	75	54
September ...	4	4	8	7	5	5	15	14	13	11	10	8	8	8	17	12	3	2	1	—	84	71
October ...	12	10	11	6	10	8	8	5	12	8	1	1	5	5	20	18	6	6	4	4	89	71
November ...	10	6	7	6	7	4	12	7	19	11	3	3	5	5	39	30	4	4	5	5	111	81
December ...	4	3	12	10	4	4	3	2	29	17	7	5	16	12	17	16	6	5	5	3	103	77
Rhondda ..	**59**	**49**	**196**	**146**	**42**	**35**	**76**	**57**	**171**	**126**	**72**	**51**	**65**	**55**	**146**	**116**	**68**	**58**	**31**	**27**	**926**	**720**

Table 21.

Ages of those attacked with Scarlet Fever in the Rhondda during 1912.

Ages.	Under 1 Year.	1 to 2 Years.	2 to 3 Years.	3 to 4 Years.	4 to 5 Years.	5 to 12 Years.	12 to 15 Years.	15 to 25 Years.	25 Years & Upwards.	All Ages.
Cases	14	53	83	120	111	468	48	18	11	926
Deaths	—	4	5	4	1	3	1	—	1	19
Per Cent. of Deaths to Cases.	—	7·5	6·0	3,3	·9	·6	2·1	—	9	2·1

Table 22.

Number of Cases and Deaths from Scarlet Fever in the Rhondda, with case-mortality during the years 1894—1912.

Year.	Number of Cases Notified.	Number of Deaths.	Mortality per cent. of Cases.
1894	441	12	2.7
1895	704	27	2.7
1896	973	43	4.4
1897	574	19	3.1
1898	408	14	3.4
1899	534	10	1.8
1900	1,823	35	1.9
1901	1,393	43	3.0
1902	833	27	4.3
1903	872	38	4.3
1904	448	20	3.4
1905	203	11	5.4
1906	362	9	2.5
1907	346	9	2.6
1908	507	7	1.4
1909	801	15	1.9
1910	1,256	24	1.9
1911	897	19	2.1
1912	**926**	**19**	**2.1**

Table 23.

Scarlet Fever Notifications, 1912, and ages of those attacked.

Wards.	Under 1 Year.	1 to 2 Years.	2 to 3 Years.	3 to 4 Years.	4 to 5 Years.	5 to 12 Years.	12 to 15 Years.	15 to 25 Years.	25 Years and Upwards.	Total.
1	—	3	2	8	4	34	4	3	1	59
2	3	14	16	29	21	95	10	4	4	196
3	1	5	3	1	7	21	2	1	1	42
4	—	1	9	7	11	42	5	—	1	76
5	4	12	19	18	20	82	10	3	3	171
6	3	2	3	15	11	35	3	—	—	72
7	2	5	7	6	10	28	2	5	—	65
8	1	9	17	18	17	76	8	—	—	146
9	—	2	6	9	10	37	3	1	—	68
10	—	—	1	9	—	18	1	1	1	31
Rhondda	**14**	**53**	**83**	**120**	**111**	**468**	**48**	**18**	**11**	**926**

Table 24.

Scarlet Fever cases in the Rhondda during 1912.

WARDS.		Total Cases.	Newly-Infected Houses.	Ages of first attacked.				Attending no School.
				Under 3 Years.	3 to 5 Years.	5 to 12 Years.	12 Years and Upwards.	
1	...	59	49	5	8	29	7	13
2	...	196	146	19	43	72	12	74
3	...	42	35	6	7	19	3	14
4	...	76	57	8	12	33	4	16
5	...	171	126	23	28	64	11	54
6	..	72	51	5	19	25	2	22
7	...	65	55	13	13	23	6	24
8	...	146	116	19	29	62	6	49
9	...	68	58	5	16	33	4	19
10	...	31	27	1	8	16	2	11
Rhondda	...	**926**	**720**	**104**	**183**	**376**	**57**	**296**

Table 25.

Particulars as to the number of occupants in Scarlet Fever-infected houses.

WARDS.	Number of Houses.	Number of Houses letting Lodgings.	Number of Occupants.			Persons per House.
			Occupiers.	Lodgers.	Total.	
1	49	18	297	61	358	7·3
2	146	76	838	171	1009	6·9
3	35	21	170	55	225	6·4
4	57	26	318	62	380	6·6
5	126	79	687	203	890	7·0
6	51	37	268	106	374	7·3
7	55	24	312	55	367	6·7
8	116	60	614	138	752	6·5
9	58	27	331	72	403	6·9
10	27	13	142	30	172	6·4
Rhondda	**720**	**381**	**3977**	**953**	**4930**	**6·8**

Table 26.—Diphtheria Notifications in the Ten Wards 1894—1912.

WARDS.	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
1	13	21	3	16	24	12	13	20	22	20	10	12	3	9	4	8	5	16	**13**
2	5	4	8	68	92	59	96	135	174	36	10	9	5	6	10	2	9	17	**13**
3	1	4	—	41	6	8	126	63	74	92	14	8	6	19	8	12	4	11	**15**
4	—	6	12	20	22	4	119	292	100	42	31	32	17	16	20	24	19	15	**17**
5	4	6	14	8	1	123	93	78	14	19	32	12	18	9	7	12	10	10	**3**
6	—	—	12	21	139	177	28	71	8	16	70	19	30	12	9	14	8	3	**5**
7	1	—	—	17	22	110	34	24	17	16	17	7	13	7	19	8	13	13	**6**
8	3	14	7	16	348	803	195	151	98	47	13	19	25	15	28	10	5	9	**8**
9	2	4	3	26	129	283	91	63	79	24	11	9	15	16	45	36	18	15	**30**
10	—	7	20	14	100	225	307	231	171	15	6	12	62	68	35	51	15	17	**95**
Totals ...	29	66	79	247	883	1804	1102	1128	757	327	214	139	194	177	185	177	106	126	**205**
Deaths ...	29	66	54	78	146	186	125	135	81	42	32	16	15	20	32	35	15	21	**19**
Per cent. of deaths to cases	100	100	68·3	31·5	16·8	10·3	11·3	11·9	10·7	12·8	14·9	11·5	12·9	11·3	17·3	19·8	14·2	16·7	**9·3**

Table 27—The number of Cases notified, and Deaths registered from Diphtheria during each month for the ten years 1903—1912.

MONTH.	1903.		1904.		1905.		1906.		1907.		1908.		1909.		1910.		1911.		1912.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
January	47	4	27	2	16	1	18	3	34	5	16	4	12	1	10	1	21	5	20	3
February	31	3	17	2	13	2	11	3	20	1	14	2	18	3	7	—	16	2	12	1
March	28	3	18	4	16	1	11	3	13	1	13	—	18	5	13	1	7	1	14	2
April	34	7	17	3	14	1	19	1	14	2	15	2	19	6	6	1	13	1	10	—
May	20	3	11	3	8	2	11	1	17	2	17	2	14	4	8	1	11	4	12	2
June .. .	23	2	20	5	8	—	10	—	5	1	18	3	8	2	8	2	6	—	5	—
July	24	4	12	2	12	1	10	2	6	1	22	4	13	1	7	1	5	—	14	1
August	19	3	8	2	5	3	4	2	13	—	13	4	14	1	7	1	5	1	13	2
September	10	1	19	—	10	—	37	6	17	1	13	1	12	2	12	2	4	—	24	1
October	19	1	31	2	15	1	33	—	15	1	13	3	18	4	10	3	14	2	26	1
November	30	6	27	4	10	1	19	—	11	1	17	3	15	4	6	1	13	3	25	5
December	21	5	7	3	12	3	11	4	12	4	14	4	16	2	12	1	11	2	30	1
Totals	327	42	214	32	139	16	194	25	177	20	185	32	177	35	106	15	126	21	205	19

Table 28—Diphtheria Cases notified each month in the respective Wards in the Rhondda during 1912.

Wards.	1		2		3		4		5		6		7		8		9		10		Monthly Total.	
Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.
January ...	—	—	2	2	3	2	4	4	—	—	1	1	1	1	1	1	1	1	7	4	20	16
February ...	1	1	2	2	1	1	2	2	—	—	—	—	—	—	—	—	1	1	5	5	12	12
March ...	2	2	2	2	4	3	—	—	1	1	1	1	—	—	—	—	2	1	2	2	14	12
April ..	2	2	—	—	1	1	1	1	—	—	—	—	1	1	2	2	2	2	1	1	10	10
May ..	2	2	—	—	1	1	—	—	—	—	1	1	—	—	1	1	—	—	7	6	12	11
June ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	4	3	5	4
July ...	1	1	4	4	1	1	1	1	—	—	—	—	—	—	1	1	1	1	5	1	14	10
August ...	—	—	1	1	—	—	—	—	—	—	—	—	1	1	—	—	2	2	9	9	13	13
September ..	1	1	—	—	1	1	2	2	—	—	1	1	—	—	—	—	2	2	17	17	24	24
October ...	—	—	—	—	—	—	3	3	1	1	—	—	1	1	—	—	3	3	18	14	26	22
November ...	1	1	1	1	3	3	1	1	1	1	—	—	—	—	—	—	11	10	7	5	25	22
December ..	3	3	1	1	—	—	3	3	—	—	1	1	2	2	2	2	5	5	13	11	30	28
Rhondda ...	**13**	**13**	**13**	**13**	**15**	**13**	**17**	**17**	**3**	**3**	**5**	**5**	**6**	**6**	**8**	**8**	**30**	**28**	**95**	**78**	**205**	**184**

Table 29.

Ages of those attacked with Diphtheria in the Rhondda during 1912, with case death-rate.

Ages.	Under 1 Year.	1 to 2 Years.	2 to 3 Years.	3 to 4 Years.	4 to 5 Years.	5 to 12 Years.	12 to 15 Years.	15 to 25 Years.	25 years and upwards.	All Ages.
Cases	4	9	12	26	29	93	15	7	10	205
Deaths	2	4	4	3	1	4	—	—	1	19
Per cent. of Deaths to Cases	50·0	44·4	33·3	11·5	3·4	4·3	—	—	10·0	9·3

Table 30.

Diphtheria Cases in 1912, and ages of those attacked.

WARDS.	Under 1 Year.	1 to 2 Years.	2 to 3 Years.	3 to 4 Years.	4 to 5 Years.	5 to 12 Years.	12 to 15 Years.	15 to 25 Years.	25 Years and Upwards.	Total.
1 .	2	1	—	3	2	3	1	—	1	13
2 ..	—	1	1	4	1	3	3	—	—	13
3 ..	—	—	1	1	3	8	1	—	1	15
4 ..	—	—	2	3	—	9	—	1	2	17
5 ..	—	—	1	—	1	—	—	—	1	3
6 ...	—	1	1	—	2	1	—	—	—	5
7 ...	1	—	—	—	1	3	—	1	—	6
8 ..	—	—	—	—	2	3	2	1	—	8
9 ..	1	3	3	2	4	12	3	—	2	30
10 ..	—	3	3	13	13	51	5	4	3	95
Rhondda	**4**	**9**	**12**	**26**	**29**	**93**	**15**	**7**	**10**	**205**

Table 31.

Diphtheria Cases in the Rhondda during 1912.

WARDS.	Total Cases.	Newly-Infected Houses.	Ages of first Attacked.				Attending no School.
			Under 3 Years.	3 to 5 Years.	5 to 12 Years.	12 Years & Upwards.	
1	13	13	3	5	3	2	7
2	13	13	2	5	3	3	6
3	15	13	1	4	7	1	3
4	17	17	2	3	9	3	5
5	3	3	1	1	—	1	1
6	5	5	2	2	1	—	2
7	6	6	1	1	3	1	1
8	8	8	—	2	3	3	1
9	30	28	7	6	11	4	13
10	95	78	5	19	45	9	29
Rhondda	**205**	**184**	**24**	**48**	**85**	**27**	**68**

Table 32.

Particulars as to the number of occupants in Diphtheria-infected houses during 1912.

WARDS.		Number of Houses.	Number of Houses letting Lodgings.	Number of Occupants.			Persons per House.
				Occupiers.	Lodgers.	Total.	
1	...	13	6	72	11	83	6·4
2	...	13	3	81	7	88	6·8
3	...	13	5	52	15	67	5·2
4	..	17	6	93	19	112	6·6
5	...	3	3	17	3	20	6·7
6	..	5	2	18	4	22	4·4
7	.	6	2	32	9	41	6·8
8	...	8	5	45	13	58	7·3
9	...	28	17	174	40	214	7 6
10	...	78	47	424	109	533	6·8
Rhondda	...	**184**	**96**	**1008**	**230**	**1238**	**6·7**

Table 33—Typhoid Fever Notifications.

WARDS.	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
1	5	21	17	17	13	17	19	70	22	19	23	15	9	20	23	—	8	9	**1**
2	4	8	10	55	13	17	14	40	1	7	18	4	22	35	5	3	2	10	**7**
3	11	3	6	1	25	5	13	37	4	1	5	—	2	1	1	3	40	64	**2**
4	10	42	8	8	87	39	16	39	20	9	150	13	17	9	4	8	7	20	**9**
5	38	34	21	31	23	19	14	19	10	7	10	3	3	39	9	3	4	2	**3**
6	10	12	17	15	34	16	6	4	3	4	221	31	21	8	16	6	4	3	—
7	12	4	15	19	17	25	3	12	16	33	12	8	12	7	3	2	1	2	**7**
8	7	7	23	37	86	50	27	28	9	175	25	15	18	11	16	14	13	8	**29**
9	40	13	30	19	43	115	42	22	13	9	11	12	21	8	8	4	6	18	**12**
10	18	9	6	8	20	59	18	37	19	11	5	7	1	11	11	4	3	2	**1**
Rhondda	**155**	**153**	**153**	**210**	**361**	**362**	**172**	**308**	**117**	**275**	**480**	**108**	**126**	**149**	**96**	**47**	**88**	**138**	**71**

Table 34—Typhoid Fever cases notified each month in the respective Wards in the Rhondda during 1912.

WARDS.	1		2		3		4		5		6		7		8		9		10		Monthly Total.	
Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases,	Cases Notified.	Primary Cases.	Cases Notified.	Primary Cases.
January ...	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
February ...	—	—	1	1	1	1	—	—	—	—	—	—	2	2	1	1	—	—	—	—	5	5
March ...	—	—	3	2	—	—	1	1	—	—	—	—	1	—	1	1	—	—	—	—	6	4
April ...	1	1	—	—	—	—	1	1	—	—	—	—	1	1	—	—	—	—	—	—	3	3
May ...	—	—	1	1	—	—	2	2	—	—	—	—	—	—	9	9	1	1	—	—	13	13
June ...	—	—	—	—	—	—	—	—	—	—	—	—	2	2	4	3	1	1	—	—	7	6
July ...	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	3	3	1	1	5	5
August ...	—	—	—	—	—	—	3	3	2	1	—	—	—	—	7	6	3	3	—	—	15	13
September ...	—	—	—	—	1	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	2	1
October ...	—	—	1	1	—	—	1	1	—	—	—	—	—	—	4	4	2	2	—	—	8	8
November ...	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	1	1	—	—	2	2
December ...	—	—	—	—	—	—	—	—	—	—	—	—	1	1	2	2	1	—	—	—	4	3
Rhondda ...	**1**	**1**	**7**	**6**	**2**	**2**	**9**	**9**	**3**	**2**	—	—	**7**	**6**	**29**	**26**	**12**	**11**	**1**	**1**	**71**	**64**

Table 35.

Typhoid Fever in the Rhondda during 1912, and ages of those attacked, with case death-rate.

Ages.	Under 1 Year.	1 to 5 Years.	5 to 15 Years.	15 to 25 Years.	25 to 65 Years.	65 Years & upwards	All Ages.
Cases	—	7	25	15	24	—	71
Deaths	—	—	4	3	9	—	16
Per Cent. of Deaths to Cases ..	—	—	16·0	20·1	37·5	—	22·5

Table 36.

Showing the number of cases of Typhoid Fever, the number of deaths, and the case mortality since 1894.

Year.	Number of Cases Notified.	Number of Deaths.	Mortality per cent. of Cases.
1894	155	28	18.0
1895	153	25	16.0
1896	153	28	18.0
1897	210	28	13.0
1898	361	40	11.0
1899	362	55	15.0
1900	172	24	13.9
1901	308	53	16.8
1902	117	22	18.8
1903	275	44	16.0
1904	480	42	8.7
1905	108	16	14.8
1906	126	20	15.9
1907	149	22	14.8
1908	96	21	21.9
1909	47	4	8.5
1910	88	12	13.6
1911	138	18	13.0
1912	**71**	**16**	**22.5**

Table 37.

Typhoid Fever Notifications, 1912, and ages of those attacked.

WARDS.	Under 1 Year.	1 to 2 Years.	2 to 3 Years.	3 to 4 Years.	4 to 5 Years.	5 to 12 Years.	12 to 15 Years.	15 to 25 Years.	25 to 65 Years	65 Years and UpWards.	All Ages.
1 ...	—	—	—	—	—	—	—	1	—	—	1
2 ...	—	1	—	—	—	1	1	2	2	—	7
3 ...	—	—	—	—	—	—	—	—	2	—	2
4 ...	—	—	—	—	—	2	1	2	4	—	9
5 ..	—	—	—	—	—	—	—	1	2	—	3
6 ...	—	—	—	—	—	—	—	—	—	—	—
7 ...	—	—	—	—	—	3	1	1	2	—	7
8 ...	—	—	1	1	2	8	3	5	9	—	29
9 ...	—	—	1	—	—	3	2	3	3	—	12
10 ...	—	—	—	—	1	—	—	—	—	—	1
Rhondda ...	—	**1**	**2**	**1**	**3**	**17**	**8**	**15**	**24**	—	**71**

Table 38.

Particulars as to the number of occupants in Typhoid Fever-Infected Houses during 1912.

WARDS.	Number of Houses.	Number of Houses letting Lodgings.	Number of Occupants.			Persons per House.
			Occupiers.	Lodgers.	Total.	
1 ...	1	—	7	—	7	7·0
2 ...	6	4	35	9	44	7·3
3 ..	2	3	7	3	10	5·0
4 ..	9	3	53	6	59	6·6
5 ..	2	2	10	4	14	7·0
6 ..	—	—	—	—	—	—
7 ..	6	4	35	8	43	7·2
8 ..	26	11	141	36	177	6·8
9 ..	11	7	61	23	84	7·6
10 ..	1	—	3	—	3	3·0
Rhondda ...	**64**	**34**	**352**	**89**	**441**	**6 9**

Table 39.

Details of Inspected Houses in which Notifiable Infectious Disease occurred during 1912.

Wards.	Number of Houses.	Number of Houses letting lodgings.	Number of Occupants.			Persons per House.
			Occupiers.	Lodgers.	Total.	
1	70	25	414	77	491	7 0
2	174	89	995	205	1,200	6·9
3	61	34	291	78	369	6·1
4	88	39	488	92	580	6·6
5	156	101	847	241	1,088	7·0
6	59	42	298	114	412	7 0
7	77	33	431	79	510	6·6
8	156	79	826	199	1,025	6·6
9	108	56	610	153	763	7·1
10	115	64	620	261	881	7·7
Rhondda	**1,064**	**562**	**5,820**	**1,499**	**7,319**	**6·9**

Table 40.—Deaths from Diarrhœa in the 7th, 8th, 9th and 10th months together with the rainfall, and earth temperature at a depth of four feet.

Week Ended.	July.					August.				September.				October.					Totals.
	6	13	20	27	Aug. 3	10	17	24	31	7	14	21	28	5	12	19	26	November 2	
Rainfall Inches ...	·46	1.47	·03	1·43	4·09	2·20	2·93	3·19	3·05	·30	0·0	0·0	·11	1·32	0·0	1·22	2·45	3·65	
Mean temperature 4 feet deep ...	53	54	58	56	54	52	52	53	53	53	51	51	50	49	47	48	46	47	
Ward No. 1 ...	—	1	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	3
,, 2 ...	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
,, 3 ...	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1
,, 4 ...	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	2
,, 5 ...	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	2
,, 6 ...	—	—	—	—	1	—	1	—	—	—	—	—	1	—	—	—	—	—	3
,, 7 ...	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
,, 8 ...	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
,, 9 ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
,, 10 ...	—	—	1	—	—	1	—	—	1	—	—	—	—	—	—	1	1	—	5
Rhondda ...	—	2	1	1	3	2	1	3	2	—	1	—	1	—	—	1	1	1	20

Table 41.—Puerperal Fever Notifications

WARDS	1394	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
1	4	2	1	1	—	—	—	4	6	—	1	1	1	—	1	1	—	1	—
2	2	2	3	1	—	3	2	3	4	2	3	—	2	2	—	—	1	—	1
3	—	—	1	—	—	1	—	2	—	3	1	—	—	1	1	—	1	3	—
4	—	4	—	—	—	—	—	—	3	1	—	3	3	5	1	4	1	2	2
5	8	6	7	4	2	5	4	1	7	1	2	2	3	3	2	1	—	—	3
6	1	1	5	4	5	4	3	6	4	1	6	2	1	5	6	2	2	1	—
7	—	—	2	1	6	3	1	6	2	2	—	1	1	2	4	—	1	2	4
8	1	2	2	4	3	4	2	2	—	2	5	1	1	3	1	1	—	1	2
9	1	2	—	—	4	1	1	2	10	7	4	2	3	9	3	2	4	—	2
10	—	1	—	1	1	2	6	2	7	2	—	1	3	1	4	2	3	2	1
Rhondda.	17	20	21	16	21	23	19	28	43	21	22	13	18	31	23	13	13	12	15

Table 42.

Showing the number of deaths and death-rate from Puerperal Fever in the Rhondda during the years 1892--1912.

Years.		Number of Deaths.	Death-rate per 1,000.	Average of Ten Years.	
1892	...	15	...	.16	.14
1893	...	20	...	.21	
1894	...	17	...	.17	
1895	...	12	...	.12	
1896	...	21	...	.20	
1897	...	10	...	.09	
1898	...	4	...	.03	
1899	...	16	...	.14	
1900	...	9	...	.08	
1901	...	21	...	.18	
1902	...	23	...	.19	
1903	...	11	...	.09	.08
1904	...	9	...	.07	
1905	...	4	...	.03	
1906	...	8	...	.06	
1907	...	16	...	.12	
1908	...	11	...	.08	
1909	...	5	...	.04	
1910	...	7	...	.05	
1911	...	8	...	.05	
1912	...	5	...	.03	

Table 43.

Showing the number of deaths and death-rate from Phthisis in the Rhondda during the years 1892—1912.

Year.	Number of Deaths.	Death-rate per 1,000.	Average of Ten Years.
1892	85	.93	.89
1893	77	.82	
1894	90	.93	
1895	82	.83	
1896	89	.88	
1897	108	1.04	
1898	103	.97	
1899	94	.86	
1900	83	.74	
1901	107	.93	
1902	99	.84	.75
1903	90	.75	
1904	115	.92	
1905	91	.71	
1906	82	.62	
1907	99	.72	
1908	103	.73	
1909	110	.76	
1910	113	.76	
1911	113	.73	
1912	**105**	**.66**	

Table 44.

The following table gives the number of persons over 10 years of age, of known occupation, who died from Pulmonary Tuberculosis during the year:—

Carpenter	1
Charwoman	1
Colliers	18
Colliery Engine-cleaner	1
,, Engine-driver	1
,, Hauliers	4
,, Labourers	7
,, Ostler	1
,, Pipeman	1
,, Rider	1
,, Roadmen	2
,, Timbermen	4
Drapers	2
Dressmakers	3
Grocers	2
Hotel Barman	1
Labourers (General)	3
Mason	1
Milliner	1
Ministers	2
Postman	1
Saddler	1
Scavenger	1
Servants (Domestic)	1

Table 45.

Causes of Death as recorded by Coroner's Inquests.

YEAR.	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
Accidents in Collieries	59	56	213	54	55	48	66	60	51	53
Alcoholism	—	2	1	—	—	1	2	—	—	—
Aneurism	—	1	—	—	1	1	2	2	1	—
Apoplexy	4	3	—	1	4	2	3	2	4	2
Blood Poisoning	2	1	1	—	—	1	1	—	1	1
Burns	7	7	8	6	9	16	15	12	12	8
Cancer	—	—	—	—	—	—	—	—	—	1
Convulsions	10	11	4	2	6	7	3	6	5	4
Crushed by Falling Building	—	—	—	—	—	1	—	—	—	—
Crushed by Railway Wagon	—	—	—	1	—	—	2	—	—	1
Crushed by Wheel	1	—	—	—	—	—	—	1	—	—
Diarrhœa	—	1	—	—	—	—	1	—	1	1
Drowning	4	1	1	4	3	7	2	10	2	8
Epileptic Seizure	—	—	—	—	—	—	3	2	2	—
Explosion	1	—	—	1	—	—	—	—	—	—
Exposure	—	—	—	—	—	—	1	—	—	—
Falls	8	8	10	5	13	8	10	7	8	5
Foreign Body in Air Passage	—	—	—	—	1	—	1	—	—	—
Found Dead	1	1	—	1	—	1	—	1	—	—
Fracture of Spine	—	—	1	2	—	—	—	1	—	—
Heart Disease	10	10	13	12	17	17	18	16	4	15
Hæmorrhage	—	2	2	1	1	2	2	1	—	1
Imperfect Respiration	—	—	—	—	—	—	1	—	1	—
Injury (character not stated)	—	—	—	—	1	—	—	1	—	—
Injury to Head	1	—	—	—	—	—	—	2	1	—
Kick of Horse	1	—	—	—	—	—	—	—	1	—
Malnutrition	—	—	—	—	—	2	—	—	1	—
Manslaughter	1	—	—	1	—	1	2	—	—	1
Meningitis	—	—	—	—	1	—	—	—	—	1
Murder	—	1	—	—	1	1	—	—	—	—
Myelitis	—	—	—	—	1	—	—	—	—	—
Natural Causes	3	2	7	1	1	4	1	1	3	5
Not Known	—	—	1	—	—	—	—	—	—	—
Old Age	—	—	—	—	—	1	—	—	2	—
Overlain	—	—	—	3	—	4	—	—	3	—
Peritonitis	—	1	—	—	—	1	—	—	—	3
Phthisis	—	—	—	—	—	—	—	—	1	—
Pneumonia	—	—	—	1	1	—	1	—	—	1
Poisoning	—	1	—	—	—	1	—	—	—	1
Poisoning (Ptomaine)	—	—	—	—	1	—	—	—	—	—
Premature Birth	—	—	—	—	—	—	1	—	2	1
Run over by Brake	—	—	—	—	—	1	—	—	—	—
Run over by Cart	4	2	5	—	3	3	—	2	3	—
Run over by Motor Car	—	—	—	—	—	1	2	—	2	3
Run over by Train	2	—	1	1	3	1	1	2	1	—
Run over by Tram	—	—	—	—	—	—	—	—	2	1
Scalds	4	7	3	13	7	12	8	6	9	9
Suffocation	4	6	2	2	6	—	2	2	4	4
Suicide	1	1	4	8	3	9	7	11	5	7
Syncope	5	10	—	—	—	4	3	3	7	5
Rhondda	**133**	**135**	**277**	**119**	**139**	**158**	**161**	**151**	**139**	**142**

Table 46.

Showing the death-rate in the Rhondda, and the actual number of deaths from all causes, and from all causes excluding deaths from Colliery Explosions, during the years 1892—1912.

Year.	All Causes.			All causes except from Colliery Explosions.		
	Number of Deaths.	Death-rate per 1,000	Average of Ten Years.	Number of Deaths.	Death-rate per 1,000.	Average of Ten Years
1892	1,805	19·8	20·6	1,805	19·8	20·6
1893	2,132	22·8		2,132	22·8	
1894	1,706	17·7		1,706	17·7	
1895	2,246	22·8		2,239	22·6	
1896	2,105	20·8		2,049	20·4	
1897	2,049	20·1		2,049	20·1	
1898	1,979	18·8		1,979	18·8	
1899	2,419	22·4		2,419	22·4	
1900	2,227	19·9		2,227	19·9	
1901	2,469	21·2		2,469	21·2	
1902	2,243	18·6	16·7	2,243	18·6	16·6
1903	1,998	16·4		1,998	16·4	
1904	2,345	18·7		2,345	18·7	
1905	2,402	18·6		2,250	17·4	
1906	2,074	15·6		2,073	15·6	
1907	2,133	15·6		2,133	15·6	
1908	2,516	17·9		2,516	17·9	
1909	2,231	15·4		2,231	15·4	
1910	2,181	14·6		2,181	14·6	
1911	2,352	15·3		2,352	15·3	
1912	**2,182**	**13·3**		**2,182**	**13·8**	

Table 47.

Table of plans of new dwelling-houses passed since 1889, furnished by Mr. W. J. Jones, Engineer to the Council.

Year.		Houses.	Year.		Houses.
1889	..	372	1901	...	451
1890	...	829	1902	...	849
1891	...	1,187	1903	...	1,036
1892	...	883	1904	...	527
1893	..	768	1905	..	796
1894	...	1,317	1906	...	735
1895	...	544	1907	...	856
1896	...	459	1908	..	1,134
1897	...	425	1909	..	1,435
1898	...	156	1910	...	1,012
1899	..	159	1911	...	659
1900	..	345	1912	–	431

Table 48.

Table of analysis of plans submitted to the Council in the course of the year 1912, furnished by Mr. W. J. Jones, Engineer to the Council.

Street and Building Plans.

	Plans submitted during the year ended 31st Dec. 1912.	Plans rejected during the year ended 31st Dec. 1912.	Total Approved.
Cottages and Villas	437	6	431
Shops	8	1	7
Lock-up Shops	14	4	10
Clubs	2	—	2
Hotel	1	—	1
Halls and Theatres	8	—	8
Chapels, Churches, & Vestries	4	—	4
Stables	14	1	13
Coach-houses	7	—	7
Cowsheds	2	—	2
Workshops	6	1	5
Piggeries	7	4	3
Urinals and W.C.'s	11	3	8
Alterations and Additions	184	21	163
Warehouse	1	—	1
New Streets	15	—	15
Surgeries	2	—	2
Offices	2	—	2
Bakehouse	1	—	1
Bridges	2	—	2
River Protection Works	2	—	2
	730	41	689

Table 49.

Summary of District Inspectors' Work, 1912.

DISTRICT.	1	2	3	4	5	6
Accumulation of Refuse ..	13	19	12	14	10	16
Accumulation of Manure ..	1	5	4	7	12	8
Blocked Drain ..	57	123	69	85	93	48
Blocked W.C. ..	18	22	44	63	22	33
Defective Drain ..	47	21	25	6	40	45
Lip Trap to Gully Trap ..	9	4	1	3	6	3
Unventilated Drain ...	1	3	1	—	—	6
Defective Ventilating Pipe ...	12	3	—	—	4	8
Waste Pipe Direct ...	1	—	—	—	—	1
No Water in W.C. ...	8	33	2	—	34	40
Dilapidated or Filthy W.C. ...	59	50	66	36	19	41
No W.C. ...	5	3	1	2	—	—
Dilapidated Back Area ...	41	45	8	21	53	60
Defective or no Rain Water Shoots	31	27	51	19	48	47
Dirty Houses ..	14	4	—	7	4	3
Overcrowding ..	4	13	1	7	9	4
Animals as a Nuisance ..	20	13	2	8	10	4
Privy to W.C. ...	—	—	—	—	—	—
Damp and Dilapidated Houses	44	41	—	13	68	51
Insufficient Water Supply ..	3	1	—	—	26	—
Other Nuisances ...	45	2	17	—	30	—

Table 50.

Summary of District Inspectors' work during 1912, as reported to M.O.H. each week.

DISTRICTS.	1	2	3	4	5	6
Cases of Infectious Disease investigated	298	176	267	204	168	166
Revisits to:—						
Infected Houses	1588	806	999	709	1214	902
Unabated Nuisances and Unremedied Defects	2274	2408	3848	3192	3914	4415
Slaughter Houses	208	242	163	186	104	145
Lodging Houses	—	258	—	76	—	—
Bakehouses	170	253	98	177	167	215
Dairies	153	230	59	79	126	80
Factories and Workshops	129	291	19	84	46	94
House-to-House	213	190	54	246	485	372
New Buildings (drains of)	96	110	229	258	254	136
Special Complaints received	43	60	81	1	3	3
Letters written to abate Nuisances :						
By Inspector	291	304	286	250	371	264
Referred to M.O.H.	471	380	663	316	541	671
Referred to Council	738	516	899	533	975	1039
New Buildings certified	116	64	28	70	62	99
Drain connections :—						
No. of Connections made	29	37	16	26	19	33
No. of Houses connected	93	67	42	84	39	128
No. of Houses connected to date ..	5288	4318	4495	3975	4957	4107
No. of Houses unconnected to date ...	33	27	66	79	74	71
Scavenging—Fines inflicted :—						
Without Brush	—	—	—	—	—	—
Without Bell	7/6	7/6	—	—	—	7/6
Neglecting Back Lanes	20/-	—	5/-	5/-	15/-	5/-
Without Cover to Cart	—	2 6	—	12 6	—	20/-
Scavenging after 1 p.m.	20/-	10/-	—	15/-	5/-	5/-
Depositing on unauthorized ground ...	10/-	5/-	—	£8/17/6	32/6	2 6
Failing to send out Cart	10/-	—	—	10/-	—	5/-
Leaving Depôt Gate Unlocked ..	—	—	—	—	—	—
Neglecting to use Broom	—	—	—	—	—	—
Improper use of Cover	7/6	—	—	—	—	—

Table 51.

Workshops and Workplaces in the Rhondda in each Inspector's District.

	1	2	3	4	5	6	Total.
Bootmakers ..	29	40	34	23	18	19	163
Bakers ..	38	29	26	23	22	24	162
Blacksmiths ..	3	4	4	4	4	3	22
Barbers ..	26	22	27	17	26	17	135
Basket-makers ...	—	—	1	—	—	—	1
Carpenters ..	16	19	15	10	11	14	85
Fried Fish Shops ..	26	25	19	20	17	11	118
Coachmakers .	1	1	3	4	—	1	10
Cycle Repairers ..	2	2	2	—	1	—	7
Dressmakers .	56	40	33	11	22	35	197
Dressmakers and Milliners (comb.)	2	3	1	—	6	3	15
Glaziers ..	4	5	2	—	2	2	15
Jewellers ..	10	6	7	1	5	7	36
Milliners ..	24	18	15	8	6	9	80
Knitters ..	—	—	—	—	—	—	—
Picture Framers ..	2	7	2	—	—	1	12
Printers ..	2	1	—	—	2	1	6
Plumbers .	4	5	2	3	2	3	19
Saddlers ..	3	1	1	1	2	2	10
Monumental Masons ..	3	—	1	2	1	2	9
Sweet Makers ..	1	2	—	—	—	—	3
Tailors ..	19	27	8	7	7	8	76
Tinmen ..	1	1	1	1	3	1	8
Quarries ..	10	13	9	10	7	9	58
Totals .	282	271	213	145	164	172	1247

Table 52.

Premises requiring Periodical Inspection.

DISTRICT.	1	2	3	4	5	6	Whole District.
Bakehouses ..	35	29	26	24	22	24	160
Cowsheds ...	14	32	7	15	7	8	83
Dairies and Milkshops	30	36	26	26	18	17	153
Lodging-Houses ...	—	7	—	2	—	—	9
Slaughter-houses ...	9	7	11	5	2	3	37
Offensive Trades ...	—	1	—	—	—	—	1

Rhondda Urban District.

Table I.

Vital Statistics of Whole District during 1912, and previous years.

Year.	Population estimated to Middle of each year.	BIRTHS.			Total Deaths registered in the District		Transferable Deaths.		Nett Deaths belonging to the District.			
			Nett.						Under 1 year of age.		At all ages.	
		Uncorrected Number.	Number	Rate.	Number.	Rate.	Of Non-Residents registered in the District.	Of Residents not registered in the District	Number	Rate per 1,000 nett births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1907	136,794	4,831		35·3	2,068	15·1	4	69	782	162	2,133	15·6
1908	140,894	5,454		38·7	2,446	17·4	10	80	1002	184	2,516	17·9
1909	145,116	5,577		38·4	2,163	14·9	6	74	724	130	2,231	15·4
1910	149,464	5,628		37·7	2,106	14·0	13	88	770	137	2,181	14·6
1911	153,775	5,463	5,491	35 7	2,276	14·8	18	94	902	164	2,352	15·3
1912	**157,951**	**5,202**	**5,236**	**33·1**	**2,108**	**13·3**	**30**	**104**	**666**	**127**	**2182**	**13.8**

NOTES :—This table is arranged to show the gross births and deaths in the district and e births and deaths properly belonging to it with the corresponding rates. For years efore 1911 the corrected number of births is not available.

Rates in Columns 5, 7, and 13 are calculated per 1,000 of estimated population, corected since census figures of 1911 became available.

The deaths included in Column 6 are the whole of those registered during the year as aving actually occurred within the district. The deaths included in Column 12 are the umber in Column 6, corrected by the subtraction of the number in Column 8, and the ddition of the number in Column 9. Deaths in Column 10 are similarly corrected by the ubtraction of deaths under one, included in the number given in Column 8, and by the ddition of the deaths under one included in the number given in Column 9.

"Transferable Deaths" are deaths of persons who, having a fixed or usual residence n England or Wales, die in a district other than that in which they resided.

rea of District in acres exclusive of area covered by water).	23,885.

Table II. RHONDDA URBAN DISTRICT.

Cases of Infectious Disease notified during the year 1912.

Notifiable Disease.	Cases Notified in the whole District.								Total Cases notified in each Ward.										No. of Cases removed to the Hospital from each Ward.										
	All Ages.	At Ages—Years. Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	Total Cases removed to Hospital.
Small Pox ...	1	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup)	205	4	76	108	7	10	...	...	13	13	15	17	3	5	6	8	30	95	6	3	7	6	...	3	2	3	3	51	84
Erysipelas ...	82	1	1	10	10	32	20	8	8	8	11	3	22	3	6	4	9	8	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ...	926	14	367	516	18	11	...	...	59	196	42	76	171	72	65	146	68	31	25	41	6	36	42	20	20	28	24	2	244
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever ...	69	...	7	24	15	16	7	...	1	6	2	9	3	.	6	29	12	1	1	3	1	7	2	...	8	25	9	...	56
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	2	...	...	1	...	...	1	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	15	...	...	...	2	13	...	...	...	1	...	2	3	...	4	2	2	1	...	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poliomyelitis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis: Under 1908 Regulations.	37	...	...	7	14	12	3	1	...	1	2	2	2	3	8	11	5	3	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis: Under 1911 Regulations.	308	1	10	43	70	150	30	4	18	24	22	30	38	42	59	21	36	18	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis: Under 1911 Regulations (Hospitals).	7	...	...	...	3	4	...	...	...	3	2	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS ..	1652	20	461	709	139	249	61	13	99	253	96	139	243	126	156	221	162	157	32	47	14	49	44	24	30	56	36	53	385

The localities (Wards) adopted for this Table are the same as those in Table III.

Isolation Hospitals (provided by the Urban District Council) :—

1. Tyntyla Isolation Hospital (Ward 4)
2. Penrhys Isolation Hospital (Ward 9)

Total available beds, 110.

Number of Diseases that can be concurrently treated 6

Table III.—Causes of, and ages at, Death, during the Year 1912 (*continued on next page*).

CAUSES OF DEATH.	Deaths in or belonging to the whole District at subjoined ages.									Deaths in or belonging to Wards (at all ages).										Total Deaths whether of "Residents" or "Non-Residents" in Public Institutions in the District
	All Ages.	Under 1 year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upwards.	Ward 1.	Ward 2.	Ward 3.	Ward 4.	Ward 5.	Ward 6.	Ward 7.	Ward 8.	Ward 9.	Ward 10.	
All Causes { Certified	2173	658	195	157	98	110	290	394	271	172	207	145	186	200	183	170	269	362	279	...
All Causes { Uncertified	9	8	...	...	...	..	1	...	...	2	1	2	1	1	...	...	...	...	2	...
1. Enteric Fever	16	...	...	...	4	3	6	3	...	...	2	...	1	1	...	1	9	2	...	12
2. Small Pox	.	...	..	...	...	...	...	...	...	...	...	..	...	...	...	...	...	..	..	...
3. Measles	127	22	50	48	7	...	...	...	...	7	12	15	15	7	2	9	16	27	17	...
4. Scarlet Fever	19	...	4	10	4	...	1	.	...	1	4	1	2	3	1	1	3	1	2	1
5. Whooping Cough	80	42	22	15	1	...	...	...	...	1	9	8	5	10	5	3	4	12	23	...
6. Diphtheria and Croup	19	2	4	8	4	...	1	..	...	1	1	1	2	...	...	1	2	8	3	2
7. Influenza	14	1	1	...	...	4	3	4	1	...	...	1	1	...	...	2	1	4	5	..
8. Erysipelas	1	...	...	...	...	...	..	...	1	1	...	..	..	...	...	...	...	...	..	..
9. Phthisis (Pulmonary Tuberculosis) ...	105	...	3	2	2	23	53	19	3	9	14	10	10	11	14	8	10	17	2	20
10. Tuberculous Meningitis	18	5	5	3	3	1	1	..	...	...	..	2	1	2	2	2	2	3	4	...
11. Other Tuberculous Diseases ...	27	3	2	2	7	7	2	4	...	3	1	1	2	3	1	2	2	6	6	2
12. Cancer, Malignant Disease	107	...	1	...	2	4	22	59	19	5	9	6	10	11	7	7	20	19	13	10
13. Rheumatic Fever	12	...	...	1	5	3	2	1	...	2	...	2	...	..	2	2	...	2	2	...
14. Meningitis	29	9	7	3	6	1	2	...	1	3	2	...	3	3	2	1	6	7	2	...
15. Organic Heart Disease	175	...	...	1	10	10	38	69	47	18	21	12	13	13	18	11	37	19	13	10
16. Bronchitis	210	75	13	4	...	1	7	54	56	21	11	7	11	26	25	22	16	44	27	3
17. Pneumonia	288	106	57	38	8	9	24	32	14	28	32	20	26	16	29	26	38	43	30	2
18. Other Diseases of the Respiratory Organs	..	...	...	...	...	...	...	..	...	..	...	..	...	...	...	...	...	...	...	...
19. Diarrhœa and Enteritis	94	64	8	3	1	3	3	7	5	11	10	12	10	7	9	3	9	13	10	...
20. Appendicitis and Typhlitis	11	...	..	...	3	2	2	3	1	1	...	1	2	1	2	...	3	1	...	3
21. Cirrhosis of Liver	6	...	...	...	...	...	1	5	...	...	...	..	1	3	...	1	...	...	1	...

Table III.—*continued.*

21a. Alcoholism	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...
22. Nephritis and Bright's Disease	43	...	...	...	3	4	16	15	5	4	10	1	1	7	7	2	1	6	4	2
23. Puerperal Fever	5	...	...	...	...	...	5	...	...	...	1	...	1	1	...	...	...	1	1	...
24. Other Accidents and Diseases of Pregnancy and Parturition	18	...	...	...	..	3	15	...	...	2	3	1	2	1	2	1	...	4	2	...
25. Congenital Debility and Malformation, including Premature Birth	238	237	...	...	1	...	...	..	...	18	23	13	27	19	17	13	23	47	38	...
26 Violent Deaths, excluding Suicide	106	2	4	14	13	16	31	18	8	10	7	5	13	14	9	8	12	13	15	9
27. Suicide	9	...	...	...	...	3	5	1	...	...	...	..	3	2	...	...	2	2	...	...
28. Other Defined Diseases	388	96	10	4	13	11	48	96	110	26	35	27	22	40	27	40	52	60	59	14
29. Diseases ill-defined or unknown	16	2	4	1	1	2	3	3	...	2	1	1	3	...	2	3	1	1	2	...
Rhondda	**2182**	**666**	**195**	**157**	**98**	**110**	**291**	**394**	**271**	**174**	**208**	**147**	**187**	**201**	**183**	**170**	**269**	**362**	**281**	**90**
Sub-entries included in above figures.																				
11 (a) Tabes Mesenterica	3	2	...	...	1	...	...	...	...	1	...	...	...	1	...	...	...	1	...	...
(b) General Tuberculosis	15	...	1	2	5	5	1	1	...	1	1	1	...	1	..	2	2	2	5	2
17 (a) Lobar Pneumonia	26	1	1	2	..	3	7	8	4	1	...	1	2	2	1	4	5	7	3	2
(b) Lobular Pneumonia	196	94	50	31	3	2	2	9	5	20	19	13	17	5	24	19	29	26	24	...
19 (a Diarrhœa	39	32	4	1	...	...	...	1	1	5	1	1	3	3	8	2	2	6	8	...
(b Gastritis	23	14	1	...	...	2	1	2	3	4	1	5	4	1	1	..	2	5	...	...
(c) Enteritis	32	18	3	2	1	1	2	4	1	2	8	6	3	3	...	1	5	2	2	...
25 (a) Congenital Malformations	18	17	...	...	1	...	...	...	...	2	1	...	1	1	3	1	1	5	3	...
(b) Premature Birth	87	87	...	...	...	...	...	...	...	8	7	6	6	11	12	1	8	17	11	..
(c) Atrophy, Debility, and Marasmus	133	133	...	...	...	...	...	...	...	8	15	7	20	7	2	11	14	25	24	...
28 (a) Venereal Diseases	4	2	..	...	...	...	...	1	1	...	1	...	...	...	1	2	...	...	...	..
(b) Other Septic Diseases	2	..	...	...	1	1	...	...	...	...	...	...	...	...	..	1	...	..	1	...
(c) Rickets	3	2	1	...	...	...	...	...	...	1	...	...	1	...	...	1	...	...	...	...
(d) Diabetes	11	...	...	...	1	...	5	5	...	...	...	2	1	2	...	1	5	...	...	...
(e) Pernicious Anæmia	14	...	...	...	...	...	5	7	2	...	2	2	...	2	2	2	1	...	3	...
(f) Leucocythæmia	2	...	...	...	...	1	...	1	...	...	...	...	...	1	...	...	...	...	1	..
(g) Epilepsy	16	2	...	...	2	3	5	3	1	1	3	2	3	2	2	...	...	2	1	...
(h) Chorea	2	...	..	...	2	...	...	...	...	1	...	...	...	..	...	...	1	...	...	...
(i) Convulsions	71	65	5	...	1	...	...	...	...	4	6	2	2	3	4	7	11	18	14	...
(j) Cerebral Hæmorrhage	64	...	...	...	1	1	5	30	27	7	9	3	1	5	4	10	11	5	9	1
(k) Embolism and Thrombosis	9	.	...	...	...	...	2	6	1	...	2	...	2	...	...	...	1	2	2	1
(l) Gastric Ulcer	10	...	...	...	...	...	6	3	1	1	1	...	1	..	1	1	2	2	1	...
(m) Intestinal Obstruction	13	2	1	1	1	..	3	3	2	1	1	1	...	4	...	...	2	3	1	1

Table IV.—Rhondda Urban District. Infantile Mortality, 1912. Nett Deaths from stated causes at various ages under one year of age. (*continued on next page.*)

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5 6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
ALL CAUSES Certified	124	33	30	23	210	75	56	53	27	33	32	29	31	37	40	35	658
ALL CAUSES Uncertified	5	..	...	...	5	1	1	1	...	...	..	...	...	...	...	...	8
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken-pox	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	1	...	...	...	1	2	3	3	2	5	5	22
Scarlet Fever	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...
Whooping Cough	...	...	...	...	...	3	3	5	5	2	3	1	5	6	6	3	42
Diphtheria and Croup	...	...	...	...	...	...	..	...	...	...	...	...	1	...	1	...	2
Erysipelas	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis	...	...	...	...	...	...	...	...	1	...	1	...	1	...	1	1	5
Abdominal Tuberculosis	...	...	...	...	...	...	...	...	2	1	...	...	...	...	...	...	3
Other Tuberculous Diseases ..	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...
Meningitis (not Tuberculous) ...	...	..	...	...	.	1	...	1	...	1	2	...	1	...	1	2	9
Convulsions	6	3	6	4	19	9	8	8	3	3	3	3	2	1	4	2	65
Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
Bronchitis	...	2	1	6	9	11	13	13	1	6	2	1	8	...	8	3	75
Pneumonia (all forms)	...	1	...	...	1	9	6	7	4	6	10	15	4	21	10	13	106
Diarrhœa	...	...	...	2	2	3	3	4	3	5	1	...	2	4	2	3	32

Table IV.—*continued.*

Enteritis	...	1	...	...	1	5	3	3	1	...	2	1	1	...	...	1	18
Gastritis	...	...	1	...	1	5	3	2	1	1	...	...	...	...	...	1	14
Syphilis	...	1	...	...	1	...	1	...	...	...	...	...	...	...	...	...	2
Rickets	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	2
Suffocation (overlying)	...	...	...	...	...	...	1	..	..	...	...	...	...	...	...	...	1
Injury at Birth	3	...	...	...	3	...	...	..	...	...	...	...	...	...	...	...	3
Atelectasis	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	2
Congenital Malformations ...	7	3	2	1	13	1	...	1	...	1	1	...	...	...	...	...	17
Premature Birth	57	10	11	1	79	6	2	...	...	...	...	...	...	...	...	...	87
Atrophy, Debility, and Marasmus ...	47	9	7	6	69	20	13	9	5	5	2	5	2	2	...	1	132
Other causes	7	3	2	3	15	2	1	1	...	1	3	...	1	...	2	...	26
TOTAL ...	129	33	30	23	215	76	57	54	27	33	32	29	31	37	40	35	666

Nett Births in the year { Legitimate 5,076
Illegitimate 160
5,236

Nett Deaths in the year of { Legitimate Infants, 647
Illegitimate Infants, 19

Rainfall Returns at Ty'nywaun Waterworks, Treherbert.
Height above Sea Level, 801 feet.

Furnished by Mr. OCTAVIUS THOMAS, Water Engineer to the Council.

MONTH.	YEAR 1903.				YEAR 1904.				YEAR 1905			
	Total Depth	Greatest fall in 24 hours.		Days ·01 or more fell.	Total Depth.	Greatest fall in 24 hours.		Days ·01 or more fell.	Total Depth.	Greatest fall in 24 hours		Days ·01 or more fell.
		Depth	Date			Depth	Date			Depth	Date	
January ...	14·45	2·15	4	25	13·84	2·42	26	23	3·90	·75	8	16
February ...	7·83	1·11	22	21	10·20	1·31	12	24	4·16	1·12	25	19
March ...	15·84	2·28	17	30	4·31	1·21	28	18	11·92	2·21	10	23
April ...	3·70	·98	25	16	6·07	1·39	2	18	8·26	1·20	30	26
May ...	5·77	1·92	16	20	5·22	1·36	23	23	·48	·34	1	5
June ...	1·85	·50	14	7	2·86	·95	14	10	9·15	1·62	20	18
July ...	4·90	1·48	21	19	5·67	1·10	22	17	2·58	1·12	1	16
August ...	13·80	2·25	20	23	6·46	1·36	3	17	10·61	2·38	4	23
September ...	9·19	1·61	8	20	5·32	1·23	30	14	4·93	1·15	9	16
October ...	20·56	2·90	14	31	5·67	1·79	16	15	4·16	·80	29	14
November ...	6·60	1·48	27	21	6·30	1·44	9	16	7·03	1·31	10	21
December ...	8·96	1·41	12	19	8·71	1·60	4	24	3·53	1·03	7	14
Totals ...	113·45	2·90	14	252	80·63	2·42	26	219	70·71	2·38	4	211
	YEAR 1906.				YEAR 1907.				YEAR 1908.			
January ..	15·75	1·47	24	26	5·48	1·79	1	23	8·35	2·11	16	18
February ...	7·66	·87	9	22	5·13	1·03	19	14	5·55	1·44	16	24
March ..	6·77	1·52	10	16	5·17	1·84	16	14	7·58	1·28	4	23
April ..	1·65	·49	24	13	6·00	·86	20	21	4·55	1·13	27	18
May ..	7·93	1·54	5	22	4·96	·95	1	18	6·74	1·39	5	20
June ..	3·20	·70	28	15	11·61	1·31	14	27	1·75	·60	13	9
July ..	2·34	·37	22	20	5·65	1·04	22	19	8·41	2·18	9	13
August ..	6·88	1·59	1	19	9·28	1·47	8	24	10·36	2·56	31	15
September ...	2·53	1·30	14	10	2·32	·57	2	8	5·57	·99	3	23
October .	13·31	1·73	2	27	11·02	1·06	29	30	3·87	·96	18	16
November ..	8·18	1·28	20	21	6·33	1·20	22	20	5·67	·93	21	17
December ..	5·09	·69	5	24	13·22	1·86	4	23	8·92	1·41	15	27
Totals ..	81·29	1·73	2	235	86·17	1·86	4	241	77·32	2·56	31	223
	YEAR 1909.				YEAR 1910.				YEAR 1911			
January ...	4·30	·70	14	20	11·65	1·34	15	26	5·12	1·03	6	17
February ...	1·45	·71	9	9	11·65	1·34	14	27	10·64	1·44	18	18
March .	7·96	1·56	24	24	3·30	1·07	1	8	3·77	1·34	10	19
April ..	6·71	1·71	22	16	5·85	1·16	12	22	6·23	1·36	21	17
May ..	2·85	1·13	24	9	4·43	·88	30	20	5·83	1·70	3	11
June ..	5·27	1·18	21	16	7·58	1·52	24	17	6·32	1·30	17	16
July ..	6·33	1·20	27	23	8·29	1·50	20	19	·56	·30	29	5
August ..	3·05	·45	17	14	12·44	1·79	18	27	6·50	·96	21	13
September .	7·80	2·78	28	12	·30	·16	14	7	5·75	1·92	19	16
October ...	19·24	2·65	15	26	6·50	1·18	31	16	6·02	1·52	21	15
November ..	4·26	1·87	28	16	10·22	1·43	13	23	14·64	1·72	15	23
December ..	17·12	2·44	10	25	14·69	1·55	14	28	24·70	2·03	8	29
Totals ..	86·34	2·78	28	210	96·90	1·79	18	240	96·08	2·03	8	199

RAINFALL RETURN AT TY'NYWAUN WATER-WORKS, TREHERBERT.

5-inch Gauge. 801 feet above Sea Level.

1912.

MONTH.	Total Depth.	Greatest fall in 24 hours.		Days ·01 or more fell.
		Depth.	Date.	
January...	11·06	1·49	4	22
February	8·33	1·57	22	25
March	16·28	1·76	16	30
April	0·78	·35	9	9
May	2·65	·63	7	15
June	9·40	1·35	27	27
July	6·75	1·87	28	22
August	17·08	1·84	3	26
September	1·76	·79	3	8
October	9·55	1·76	26	19
November	6·48	1·04	28	23
December	16·83	2·01	11	29
Totals	106·95	2·01	11	255

Meteorological Returns.—The Hospital, Ystrad-Rhondda.
(Height above Sea Level, 590 feet).

MONTH.	YEAR 1904.				YEAR 1905.				YEAR 1906.			
	Total Rainfall in Month in inches.	Greatest fall in 24 hours.	Date of greatest fall.	Days on which ·01 or more Rain fell	Total Rainfall in Month in inches.	Greatest fall in 24 hours.	Date of greatest fall.	Days on which ·01 or more Rain fell	Total Rainfall in Month in inches.	Greatest fall in 24 hours.	Date of greatest fall.	Days on which ·01 or more Rain fell
January ...	11·70	2·00	26	8	2·26	·37	8	15	12·53	1·66	16	23
February ...	8·64	1·38	12	7	1·78	·40	25	12	5·47	1·10	15	21
March ...	3·52	1·00	28	17	11·09	1·97	10	22	4·36	1·05	10	11
April ...	4·72	1·00	4	18	5·22	·78	28	20	1·43	·53	24	11
May ...	4·70	1·54	23	14	·26	·14	31	2	6·11	1·76	5	16
June ...	2·25	1·00	14	6	5·99	1·51	19	16	2·67	·85	28	11
July ...	5·28	1·15	25	13	1·93	·65	1	11	1·19	·33	22	11
August ...	5·43	1·27	21	17	8·23	1·71	4	17	5·04	1·10	24	16
September ...	5·10	1·00	30	13	4·89	1·60	8	12	1·72	·77	14	6
October ...	3·21	1·24	7	11	4·34	1·12	30	13	12·09	1·60	1	23
November ...	5·27	1·43	7	14	6·76	1·18	22	19	6·32	1·25	20	16
December ...	7·09	1·04	4	21	2·87	·79	6	12	3·62	·40	9	18
Totals ...	66·91	2·00	26	159	55·62	1·97	10	171	62·55	1·76	5	183
	YEAR 1907.				YEAR 1908.				YEAR 1909.			
January ...	4·00	1·41	1	13	6·03	1·47	16	12	3·37	·82	15	15
February ...	3·94	1·06	19	12	4·27	1·75	16	22	1·40	·59	9	5
March ...	3·64	1·20	15	11	4·20	1·30	5	13	6·89	1·73	24	23
April ...	5·31	1·00	8	19	3·96	1·14	27	14	4·96	1·22	22	14
May ...	4·56	·94	1	17	4·24	·84	14	16	2·38	·77	24	5
June ...	7·64	1·31	14	25	·95	·30	11	5	3·17	·63	21	12
July ...	3·98	·69	22	14	6·17	1·86	9	13	3·66	1·14	27	18
August ...	6·81	1·33	1	21	7·78	2·06	31	16	2·66	·43	17	13
September ...	1·76	·45	1	8	4·24	·86	3	18	4·58	1·48	28	11
October ...	9·72	·82	10	30	4·01	1·70	19	12	13·00	1·90	7	20
November ...	4·69	1·06	22	18	4·58	·83	12	13	3·20	1·21	28	9
December ...	11·55	1·75	4	20	6·88	1·04	9	25	14·38	1·89	2	18
Totals ...	67·60	1·75	4	208	57·31	2·06	31	179	63·65	1·90	7	163
	YEAR 1910.				YEAR 1911				YEAR 1912.			
January ...	9·39	1·13	31	20	3·13	·91	5	8	8·31	1·20	8	21
February ...	9·57	1·60	14	26	7·78	1·71	27	14	6·53	1·43	22	20
March ...	2·88	1·01	1	6	2·92	1·47	10	7	13·59	2·00	4	30
April ...	4·20	1·05	12	16	4·37	1·22	20	10	·49	·27	9	3
May ...	3·35	·87	30	20	3·23	1·38	3	6	2·07	·46	4	11
June ...	7·14	1·46	5	14	3·61	·68	17	16	7·57	1·06	27	27
July ...	5·22	1·27	24	15	·28	·20	31	3	5·78	1·15	28	21
August ...	9·27	1·40	18	22	5·21	·87	28	15	12·77	1·55	28	23
September ...	·23	·14	14	3	3·83	1·30	19	13	·97	·56	29	5
October ...	5·60	1·03	18	16	5·02	1·37	29	15	8·08	1·50	27	18
November ...	8·36	1·32	10	19	10·04	1·40	15	20	3·99	1·00	26	13
December ...	9·27	1·26	15	24	16·95	1·46	19	27	12·15	1·70	11	29
Totals ...	74·48	1·60	14	201	66·37	1·71	27	154	82·30	2·00	4	221

THE ANNUAL

REPORT

OF THE

SCHOOL MEDICAL OFFICER

TO THE

Rhondda Education Authority

FOR THE YEAR 1912

Rhondda Urban District Council.

Members of the Rhondda Education Committee.

Councillor WILLIAM EVANS THOMAS, M.D. (Chairman).
Mrs. FLORENCE NICHOLAS (co-opted Member).
Councillor W. P. THOMAS (Vice-Chairman).
,, GWILYM LLOYD (9 months).
,, D. R. JONES (3 months).
,, DAN DAVIES.
,, GRIFFITH EVANS.
,, ALFRED GLADSTONE TRIBE.
,, WILLIAM THOMAS JONES, J.P.
,, DAVID THOMAS (9 months).
,, EDWARD JONES (3 months).
,, WILLIAM LEWIS.
,, WALTER WILLIAMS.
,, THOMAS THOMAS.
,, JAMES JAMES.
,, WILLIAM SAMUEL LANE (9 months).
,, RHYS SAMUEL GRIFFITHS, J.P. (3 months).
,, NOAH REES.
,, EVAN JOSHUA RODERICK.
,, JOHN DAVID WILLIAMS.
,, MARK HARCOMBE.
,, DAVID WILLIAMS.
,, EDGAR MORGAN (9 months).
,, LEMUEL PRICE GRIFFITHS (3 months).
,, LEWIS HOPKIN.
,, THOMAS EVANS, J.P.
,, WILLIAM THOMAS DAVIES.

Councillor THOMAS GRIFFITHS, J.P.
„ BENJAMIN DAVIES.
„ ROWLAND HUGHES, B.D.
„ EDWARD THOMAS WOOD.
„ WILLIAM HENRY MATHIAS, J.P.
„ ABEL JACOB.
„ HENRY EDWARD MALTBY.
„ DANIEL EVANS.

Clerk to the Committee: W. P. NICHOLAS.
Director of Education: T. W. BERRY.
Architect: JACOB REES.
School Medical Officer: J. D. JENKINS.
Medical Inspectors: J. LAMBIE.
J. W. G. MYLER.
Medical Inspection Clerk: C. G. DAVID.

Rhondda Urban District Council.

To the Chairman and Members of the Education Committee.

Mrs. Nicholas and Gentlemen,

I beg to submit for your consideration my annual report as your School Medical Officer for the year 1912.

In its main and fundamental features the work of medical inspection of the children attending the elementary schools throughout the Council's area described in previous reports was continued throughout the year under review. In certain matters of detail the scheme was improved, while the statistical data relating to the physical condition of the children in our possession were necessarily augmented, and will help us to not only appreciate the degree, number, and character of the defects from which our school population is suffering, but also to seek, to find, and to apply such remedies or preventive measures as our present scheme places at our disposal, with the view of rendering the children whom the Council are expected to educate the more ready and able to receive and to retain the knowledge which is imparted to them at so much cost and with such great pains.

The performance of the routine work has been rendered less difficult by the co-operation, readily rendered, of your educational staff, both in the office and at the schools.

Yours faithfully,

J. D. JENKINS.

The Council Offices,
Pentre,
July, 1913.

GENERAL SCOPE OF MEDICAL INSPECTION IN PUBLIC ELEMENTARY SCHOOLS.

The powers granted to and the obligations imposed upon local Education Authorities in regard to the medical inspection of school children has remained practically unaltered throughout the year, and the requirements of Article 58 (b) of the Code of Regulations issued by the Board of Education provide that

> "The Board must be satisfied that provision has been made for the medical inspection of all children admitted to the school in the year, and of all children who are expected to leave school in the year—the year in each case being the twelve months ending on the 31st of July."

The general arrangement adopted in the preparation of the report is based upon the recommendations of the Board of Education.

GENERAL CHARACTER OF THE DISTRICT.

The Urban District of Rhondda was ascertained to contain on the night of the 2nd of April, 1911, a total population of 152,781 persons, of whom 32,065 were children attending the elementary schools of the district, and by June of 1912 these two numbers were estimated or calculated to have reached 157,951 and 33,861 respectively. The proportion of school-going population in each case is equivalent to 21 per cent., or more than one-fifth of the total number of persons of all classes and ages in the Rhondda. The prosperity and populous character of the district are almost entirely dependent upon the winning and working of the coal which is obtainable from within its area, and which is highly valued on account of its high calorific properties and the relatively small amount of smoke to which its combustion gives rise. Practically all the members of the community are directly or indirectly dependent upon this industry. In conformation, the district in the main consists of two narrow winding valleys, each of which begins in a *cul-de-sac* at its upper or north-western end before taking a generally south-easterly direction to join the other at Porth to form one valley, which, a little over a mile below the junction, is continued into the upper end of this portion of the Pontypridd Urban District. The hills skirting and separating the two valleys are both high and steep, and this feature exercises considerable influence upon the incidental no less than upon the essential activities of the district.

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6 (a)—GENERAL REVIEW OF THE HYGIENIC CONDITIONS PREVALENT IN THE SCHOOLS.

ACCOMMODATION. The exceptionally high birth-rate which has been for many years a feature of Rhondda statistics and the rapid increase of the population by immigration, make it very difficult for the Education Committee to keep pace with the demand for accommodation. In addition, there is an increasing difficulty in obtaining satisfactory sites for school buildings, and when these are obtained there is a further difficulty in estimating the amount of accommodation required owing to the irregular rate of increase of the population in different parts of the district. Thus it has been experienced that new schools built in rapidly-growing portions of the area have had the accommodation provided by them taxed to the utmost within a few weeks of the opening of the schools.

School Buildings. The schools are in all instances substantially built of native stone with brick facings, and all but two or three are of one storey. The newer schools are favourably situated on the hillsides, so that there is no interference with the free access of air or light, but a number of the older schools are built on low-lying land adjoining the rivers, and are in consequence liable to sudden inundations from the rapid rising of the rivers in times of flood.

A number of the school buildings have suffered great damage owing to the subsidence of the ground on which they are built, the result of colliery workings underneath.

The efficiency of medical inspection is to some extent impaired by the lack, in the majority of the schools, of suitable rooms for the performance of the work. Even in those schools in which a teacher's private room is available, the conditions are generally only slightly improved, for such rooms are usually too small, badly lighted, or in other respects unsuitable. The accommodation was increased in the course of the year by the addition of new schools at Ynyswen and Gelli (Bronllwyn), by the re-erection of the school destroyed by fire at Llwyncelyn in the previous year, and by extensions at Dyffryn and Porth Schools.

Playgrounds. As mentioned in previous reports, playgrounds are generally too small in proportion to the number of scholars accommodated. In a considerable number there is no provision of shelters for the children in wet weather.

Some of the playgrounds are paved, some partially paved, and some unpaved, the unpaved portions being usually covered with loose gravel.

VENTILATION. Ventilation of the schools is secured by means of ventilators placed in windows, walls, and ceilings, the efficiency being dependent upon "natural" agencies. The teachers are found on the whole to maintain a satisfactory state of ventilation, but this is difficult of attainment in some schools where overcrowding exists, especially in cold weather, owing to the tendency to the formation of injurious cross-currents under such conditions.

LIGHTING. Gas or, in a few instances, electric light is used when natural light is insufficient. In many class-rooms of the older schools the direction from which light is admitted in relation to the scholars is at fault, and in a considerable number of cases the defect does not seem capable of being satisfactorily remedied. In the more modern schools, however, the direction from which light is admitted is generally correct.

As noted in previous reports, the upper portions of the windows are nearly always in a very dirty condition owing to the inability of the female cleaners to reach the upper sections with safety. The appointment of male cleaners in some of the schools has effected a decided improvement in this direction.

WARMING. The great majority of the schools are warmed by means of stoves and open fires, and a few by hot-water installations. Neither method has given universal satisfaction, much, of course, depending upon the skill and attention given in its application in matters of detail. The need for some more efficient arrangements for drying clothes deserves attention, and the consideration of the problem in conjunction with the warming of the school-rooms seems appropriate. Records of the temperatures at the schools are kept, so that an intelligent interest is taken in the maintenance of a uniform and suitable temperature.

Equipment. A gradual improvement is noticeable in the equipment of the schools. Old-fashioned multiple desks are being replaced by modern desks of the dual type, and little tables and armchairs have been provided in a number of the Infants' Departments. As many of the children in this district attend school at the age of three years, a better provision of nursery appliances in the shape of couches or cots in the babies' rooms is desirable. At the age of three years, a short time spent in sleep during school hours is natural and desirable, and reasonable provision should be made to meet this requirement.

General Sanitation—General Cleanliness. The methods of school cleaning remain, in the main, the same as in previous years. Following upon a report presented to the Building Committee early in 1911, a trial was given in one or two schools to the regulations drawn up by the Committee with satisfactory results, in that an improved condition of cleanliness was secured in those schools. It is desirable, therefore, that the regulations should be made generally applicable in all the Council's schools throughout the district.

Sanitary Conveniences. The trough type of closet is used in nearly all the schools, but, in a few, pedestal closets with separate flushing appliances have been introduced during the last few years.

The flushing of the trough closets is not done with sufficient regularity or frequency. Accumulations, apparently of several days, have been observed on several occasions by the Medical Inspectors. The failure to flush with greater regularity and frequency appears to be largely due to the desire to keep the water consumption at as low a level as possible, the amount of water used being recorded by meter. In view of the importance of the maintenance of cleanliness in the schools and on school premises, both on account of the immediate effect of conditions of an opposite kind upon the pupils and of the educational value of clean practices and habits upon the future existence of the children, it is worthy of consideration whether it will not be far preferable to supply the schools with water in accordance with their rateable value, now that the completion of the Llyn Fawr Reservoir will in future make it unnecessary to curtail to the same extent the legitimate use of water for the purpose of securing clean and wholesome conditions in all buildings, whether public or private.

LAVATORIES. In the majority of the schools, stoneware basins of a good type are provided for the children's use. Soap and roller towels are also provided, but usually at the end of the school day it is difficult to find a clean portion of towel. In some of the girls' departments a very high standard of cleanliness of hands and face is maintained, but, on the other hand, a number of the lavatories have the appearance of being very little used.

CLOAK-ROOMS. Cloak-room provision remains much the same as described in previous reports, but a certain amount of improvement has taken place, through the provision of better cloak-rooms where alterations to school buildings have been carried out. No arrangements for drying clothes or boots exist except in a few schools heated by hot water, where suitably placed radiators serve to assist in that purpose. The plan of providing detached and open cloak-rooms is worthy of consideration, for drying is thus affected by natural means and the children are not exposed to the influence of the unpleasant and unwholesome emanations arising from damp and drying clothes as is not infrequently the case under the relative positions of the class-rooms and cloak-rooms now existing in many of our schools.

Water Supply. All the schools are supplied with water from the mains of the Council or of the Pontypridd and Rhondda Joint Water Board. The water is supplied by meter, and, as already stated, too much economy is observed in its use (cf. "Sanitary Conveniences").

RELATION OF THE GENERAL ARRANGEMENTS OF THE SCHOOL TO THE HEALTH OF THE CHILDREN.

As far as the records of medical inspection are concerned, no constantly lower standard in physique or state of health can be shown to exist in schools where the general surroundings and arrangements are unsatisfactory, than in the more modern schools which are more favourably situated and better planned. That a badly-arranged and badly-situated school does have an unfavourable influence on the health of the children no one can doubt, but it is not possible to demonstrate this with the figures at present available.

6 (b)--CO-RELATION WITH THE PUBLIC HEALTH SERVICE.

The School Medical Service is directed and controlled from the same department as the Public Health Service, so that all overlapping of work is avoided and a maximum degree of economy in working is obtained.

The major part of the actual work of medical inspection is performed by one whole-time medical inspector, and a lesser proportion by the Assistant Medical Officer of Health, who devotes the greater part of his time to other branches of the Public Health Service. The six Health Visitors in the service of the Council also act as school nurses, and "follow up" to their homes the children found defective on medical inspection. Having in very many instances already made the acquaintance and served as the counsellors of the mothers in matters relating to the children's physical welfare, the Health Visitors renew the association in their capacity as School Nurses without fuss or friction, and the extent of their influence is correspondingly increased.

The Schedule of Medical Inspection issued by the Board of Education has been adhered to in effect except in two respects.

(1) Chest measurements of boys are taken and recorded.

(2) A record of vaccination marks is made. No use whatever in connection with the Vaccination Acts is made of the records obtained, and no comment is made to parent or child whether marks are present or absent.

The Assistance at present rendered to the Medical Inspectors is such as can be provided by the previously existing staff in the Education Department and by a Junior Clerk in the School Medical Officer's office.

In the course of the year four additional Health Visitors were added to the staff of the Health Department, the total number of Health Visitors being thus increased to six, who have since the 1st of June, 1912, devoted one-third of their time to the work of "following up" defective school children, and have on occasion rendered help to the medical inspectors in schools where adequate assistance from the teaching staff could not be secured.

The Director of Education and his staff have afforded the medical inspectors the necessary facilities for the performance of their duties, and the relations between the officers of the School Medical Service and the other officers of the Education Department have been cordial from the inception of the work of medical inspection.

The teachers have given great assistance to the medical inspectors in sending leaflets to parents to notify them of the inspector's visit and in filling up forms. This work is often very considerable and is occasionally required at times when the teachers' energies are absorbed to an exceptional extent in the performance of other work. Great credit is therefore due to the teachers, not only for their assistance, but also for the intelligent and sympathetic interest shown by them.

THE PRESENCE OF PARENTS is invited by means of circulars (M.I. 5) sent out immediately prior to the medical inspection of each department. The invitations were accepted by only a very small proportion of parents, only 173 having attended at the examination of their children in the course of the year, the proportion of parents attending to the number of children examined thus having been 3.1 per cent. A considerable number of the parents who attended did so at the special request of the medical inspector, who was thus able to obtain further information regarding the children, or to give instructions which could not otherwise be equally well conveyed.

The presence of parents, while entailing the expenditure of rather more time over the examination, is very desirable for many reasons, the chief amongst these being the opportunity it affords of explaining the necessity for treatment in the event of a defect being discovered. On the other hand, the younger children are often more restive under examination when their parents are present than when the teachers only are in attendance.

DISTURBANCE OF SCHOOL ARRANGEMENTS INVOLVED BY THE INSPECTION.

The amount of disturbance of school arrangements varied according to the adaptability of the school buildings for the work, together with the state of each school as regards overcrowding. The minimum of disturbance occurred in schools where a teacher's private room is available for the work. These private rooms are, generally speaking, too small to be quite suitable, but were used where possible. In a few of the schools the conditions were such as to render efficient examination almost impossible, the occupants of one overcrowded class-room having to be turned out into another equally over-crowded one, the noise and confusion resulting continuing throughout the medical inspector's visit.

It occasionally happened that the visit of the medical inspector to a school occurred at a time when for accidental and unforeseen reasons the school was under-staffed. As it is absolutely necessary to have one or more teachers present when girls or infants are being examined, and desirable in the case of older boys, it will be understood that under the circumstances mentioned above the provision of adequate assistance is impossible without considerably disturbing the teaching arrangements of the school. In some such instances the services of one or more of the older girls are available and used; in other cases the school nurses have assisted since their appointment in the course of the year. The work of filling up forms and sending out circulars sometimes necessitates the temporary withdrawal of a teacher from the performance of his or her ordinary duties.

6 (c)—GENERAL STATEMENT OF THE EXTENT AND SCOPE OF THE MEDICAL INSPECTION CARRIED OUT DURING THE YEAR.

During the year, 420 visits to schools and departments were paid by the Medical Inspectors (Drs. Lambie and Myler), both the morning and afternoon sessions being enumerated. Most of the time so spent was utilised in the medical examination of 5,194 entrants and leavers and 418 cases of a special character. The comparatively small amount of time remaining was spent in the re-examination of children found defective on previous occasions for the purpose of ascertaining to what extent the notices containing advice to the parents of the defective children had been complied with.

In addition, visits were paid to certain schools at irregular intervals and as occasion required by the School Medical Officer or other member of the medical inspection staff for such purposes as the inspection of school buildings, special medical examinations, or matters relating to the administrative work of the school medical service.

Principle of selection of Children examined. As in previous years, the children examined have been drawn from three groups:—

(1) All the entrants or all children admitted to each infants' department since the date of the previous medical inspection.

(2) All children expected to leave school within twelve months of the date of the medical inspector's visit.

Owing to the absence, arising from various causes, of members of both these groups, re-visits were paid to the schools for the purpose of carrying out the medical examination of children thus missed on previous occasions.

(3) In addition to the entrants and leavers, which are the groups required to be examined under the Code of Regulations, the Committee considered it desirable that another or "special" group should be examined. This group includes all children of whatever age who in the opinion of the inspector or teacher require medical attention. This course has been adopted because it is believed that the amount of benefit thereby probably accruing to the school population as a whole would be proportionately much in excess of the expenditure of time involved by the examinations, as those so selected are found to include a much larger proportion of defective children than those forming the groups of entrants and leavers. In the case of these special cases, however, the full details of the ordinary schedule of inspection are not entered up by the medical inspectors, who confine themselves to a careful examination for the defect suspected to exist, the results being recorded on distinctive cards. As expected, this group has been steadily becoming smaller; thus in the course of the year under review the total number in the group amounted to 418, whereas in the previous year it reached 642 (296 boys and 346 girls).

The total number of children examined in the three groups amounted to 5,612, classified according to age and sex as follows:—

Table 1.

Age in Years.	Sex.	No. of Boys & Girls examined.		Totals.
		Routine Groups.	Special Group.	
3 to 4	Boys	348	—	348
	Girls	377	1	378
4 to 5	Boys	724	—	724
	Girls	662	3	665
5 to 6	Boys	395	19	414
	Girls	403	11	414
6 to 7	Boys	139	17	156
	Girls	143	15	158
7 to 8	Boys	49	25	74
	Girls	50	36	86
8 to 9	Boys	8	16	24
	Girls	14	40	54
9 to 10	Boys	2	45	47
	Girls	1	36	37
10 to 11	Boys	16	33	49
	Girls	47	36	83
11 to 12	Boys	65	27	92
	Girls	168	28	196
12 to 13	Boys	734	15	749
	Girls	504	11	515
13 to 14	Boys	160	2	162
	Girls	175	2	177
14 to 15	Boys	1	—	1
	Girls	9	—	9
All ages	Boys	2,641	199	2,840
	Girls	2,553	219	2,772
	Totals	5 194	418	5,612

NUMBER OF CHILDREN REFERRED FOR SUBSEQUENT EXAMINATION. Very few re-examinations were made for diagnostic purposes, but a considerable number of children were re-examined in the course of the "following-up" inquiry which was conducted in the course of the year, and of which details will be found in a later portion of this report. It is expected, however, that with the establishment of a school clinic the number belonging to the former category so referred will be considerably increased, because the more favourable conditions under which the examinations will be conducted at the clinic will enable the inspectors to considerably reduce the number of cases now classed as of doubtful character which come under their observation, whereas a re-examination at the school would generally fail to do so because the circumstances rendering the diagnosis uncertain at the first examination would usually continue unaltered.

The number of children in respect of whom directions were given for treatment of defects amounted to 565, as compared with 569, 664, and 1,034 in 1911, 1910, and 1909 respectively.

The average time per head occupied by inspection amounted to 11.2 minutes. The average number of children examined each day by each Inspector amounted to 27 in the course of the year under review. These figures imply that the average time taken up by each examination was greater and consequently that the rate of examination each day was lower than in the previous year. This was at least partly accounted for by the circumstance that the amount of time given to the revisitation of schools and re-examination of defectives was relatively greater in the course of 1912, the conditions then obtaining necessarily involving a relatively greater expenditure of time in connection with incidental but unavoidable circumstances.

6 (d) GENERAL REVIEW OF THE FACTS DISCLOSED BY MEDICAL INSPECTION.

The number of defects and diseases found by the Medical Inspectors in the children examined, together with the percentage proportion of the number suffering from each disease or defect, is given in the following table.

The total number of children examined amounted to 5,612, of whom 418 belonged to the "special" group.

Table 2.

Disease or defect.	No. of Children suffering from each disease.	Proportion per cent. of the number so suffering to the number examined.
Skin: Contagious (excluding Ringworm) ..	63	1·12
Skin: Non-contagious	100	1·78
Ringworm of Scalp	10	0·17
Ringworm of other parts	4	0·07
Heart disease	40	0·71
Lung disease (non-tuberculous)... ..	30	0·53
Lung disease (tuberculous)	3	0·05
Tuberculosis of other parts (bone, &c.) ...	4	0·07
Affections of nervous system	18	0·32
Mentally defective	31	0·55
Enlarged tonsils	277	4·93
Adenoids	32	0·57
Polypus (nasal)	1	0·017
Carious teeth (4 or more)	1093	19·47
Defective vision	358	6·37
External eye disease...	93	1·65
Squint	77	1·38
Ear disease	29	0·51
Deafness	65	1·15
Defective speech	27	0·48
Enlarged glands	20	0·35
Enlarged Thyroid gland	10	0·17
Hernia	17	0·30
Rickets	8	0·14
Deformities and Tumours	113	2·00
Infectious Diseases	9	0·16
General Neglect	17	0·30
Pediculosis	690	12·47

One of the most noticeable features of the above table is the small extent to which its respective items differ in the percentage proportion of their occurrence from the corresponding ones in the tables of previous years. In the case of the more common ailments especially, the variation is remarkably small.

NUTRITION.

The classification into excellent, normal, subnormal, and bad is adopted in the following table:—

Table 3.

	Boys.		Girls.		Infant Boys.		Infant Girls.		Totals.	
	Number of Records.	Per Cent.	Number of Records.	Per Cent.	Number of Records.	Per Cent.	Number of Records.	Per Cent.	Number of Records.	Per Cent.
Excellent	10	10	—	—	—	—	—	—	10	0·2
Normal	956	98·0	892	98·7	1640	98·5	1634	99·1	5122	98·6
Sub-normal	10	1·0	12	1·3	22	1·3	15	0·9	59	1·1
Bad	—	—	—	—	3	0·2	—	—	3	0·1

The most striking features of the above table are the relatively small numbers of children among the excellently- and badly-nourished and the correspondingly large number classified by the medical inspectors as not seriously departing from the normal standard. Obviously very much must depend upon the personal equation of the medical inspector in each case as to whether a child near the borderland between two groups is placed on the one side or the other, and consequently statistical comparison between the state of nutrition of the children in different districts is correspondingly difficult. For the moment chief importance, of course, attaches to the groups classified as subnormal and bad, which together constitute 1.2 per cent. of the children examined, and it is obviously of great consequence to the individual children so placed that the exact cause or causes which are operating towards the production and continuance of this condition should be discovered and, if possible, removed. It is believed that with the establishment of a school clinic and the employment of school nurses the means at our disposal in prosecuting such inquiries will be increased to such an extent as to enable us, in the course of time, to apply appropriate remedies or remove existing conditions of an unfavourable character to the permanent advantage of these children, not only during their school days, but also in after life.

UNCLEANLINESS.

The appended tables (4, 5, 6, and 7) set out the percentage proportions of children who were found on medical inspection to be in a condition removed from a desirable state of cleanliness, in respect of their clothing (its cleanliness and sufficiency) or persons. Distinction is drawn between footgear and the remainder of the clothing as well as between uncleanliness of the head and of the body.

Table 4—Clothing.

	Boys.		Girls.		Infant Boys.		Infant Girls.		Totals.	
	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
Good ...	265	27·2	331	36·6	579	34·8	458	27 8	1633	31·5
Average	539	55·2	513	56·7	880	52·8	953	57·8	2885	55·5
Bad ..	172	17·6	60	7·7	206	12·4	238	14·4	676	13·0

Table 5—Footgear.

	Boys.		Girls.		Infant Boys.		Infant Girls.		Totals.	
	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
Good ..	256	26·2	322	35·6	560	33·6	448	27·2	1586	30·5
Average	551	56·4	496	54·9	852	51·2	915	55·5	2814	54·2
Bad ..	169	17·4	86	9·5	253	15·2	286	17·3	794	15·3

Table 6.—Uncleanliness of the body.

	Boys		Girls.		Infant Boys.		Infant Girls.		Totals.	
	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
Clean	812	83·3	718	79·4	1395	83·8	1262	76·5	4187	80·6
Somewhat Dirty	155	15·8	175	19·4	255	15·3	373	22·6	958	18·5
Dirty	9	0·9	11	1·2	15	0·9	14	0·9	49	0·9

Table 7.—Uncleanliness of the head.

	Boys.		Girls.		Infant Boys.		Infant Girls.		Totals.	
	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
Clean	829	85·0	470	52·0	1414	84·9	1036	62·9	3749	72·2
Somewhat Dirty	135	13·8	72	8·0	232	14·0	279	16·9	718	13·8
Dirty	7	0·7	8	0·9	9	0·5	7	0·4	31	0·6
Verminous	5	0·5	354	39·1	10	0·6	327	19·8	696	13·4

A comparison of the statistics bearing upon the general condition and uncleanliness of both clothing and persons of the children examined in 1912 with those relating to the previous year is considerably to the disadvantage of the year now under review in each of the directions dealt with in the above tables. The difference is not attributable to the adoption of a more severe standard or to a change in inspectors, for all the medical inspections throughout the year were conducted by Drs. Lambie and Myler, who have acted as medical inspectors since the inauguration of the work in the district after the enactment of the Education (Administrative Provisions) Act, 1907. The only explanation which occurs to one is that the parents are becoming accustomed to and less apprehensive of the periodical medical inspection in the schools, and that consequently they exercise less care in the preparation of the children's persons and clothing than during the years immediately following the introduction of medical inspection into the scheme of education throughout the country. If this explanation will prove justified by further observation, it follows that the proportions recorded in this report approximate more nearly the normal condition of the school-going population of the district.

In connection with this subject the installation of shower or spray baths in schools yet to be built is worthy of consideration by the Education Authority, especially where a steam boiler will be required for heating purposes. The initial cost of such provision would be but a small fraction of the weole,—the cost usually not exceeding £300,—and the maintenance charges under the circumstances mentioned would be but small. Baths so provided would give the following advantages (among others):—

(1) They would secure for each child throughout the school a periodical bath under proper supervision.

(2) The children so favoured would doubtless benefit by the treatment both in health and education.

(3) The children would when young acquire the habit of regular bathing and would tend to continue the application of the principle of personal cleanliness throughout life. Moreover, the habit so acquired would react beneficially in many ways upon the adult members of the community and upon the homes themselves, for the practice of personal cleanliness naturally tends to demand and to secure cleanliness of surroundings also. For the same reason the provisions of the Coal Mines Regulation Act, 1911, relating to pit-head baths would secure more early recognition and application to the advantage of the vast majority of the homes throughout the district.

RINGWORM.

In the course of the year only 14 cases of ringworm were discovered, the body being affected in 4 and the scalp in 10 instances, the percentage equivalents being .07 and .17 respectively These proportions are much lower than those found in any previous year, and as there is no reason for suspecting that the vigilance exercised is now less than formerly it must be concluded that the prevalence of the disease had diminished during the year 1912 as compared with previous years. At present, however, the amount of supervision to which children discovered to be suffering are subjected is inadequate, and the detection of ringworm in children other than those submitted for medical inspection is infrequent. When discovered the sufferers are excluded from school, but its successful treatment by drugs requires much perseverance on the part of both parent and medical attendant, and under present arrangements the return of the child to school before its complete cure cannot always be obviated.

CONDITION OF THE CHILDREN'S TEETH.

The following table sets out the numbers and proportions of the children in the various departments who were found to have sound teeth, one to three carious teeth, and four or more carious teeth.

Table 8.—Condition of the Teeth.

	Boys.		Girls.		Infant Boys.		Infant Girls.		Totals.	
	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
No carious teeth	160	16·4	95	10·5	482	28.9	496	30·1	1233	23·7
1-3 carious	675	69·2	636	70·4	732	44·0	749	45·4	2792	53·8
4 or more carious	141	14·4	173	19·1	451	27·1	404	24·5	1169	22·5

As may be expected, no great difference exists between the figures relating to the year under review and the immediately preceding one, but both show very strikingly the extent of the evil and the consideration of the measures which may be applied towards its reduction requires careful discrimination. An attempt to offer means of conservative treatment to all the school children in the district who require attention would probably prove futile on account of the magnitude of the task, as a large number of full-time dentists would be needed to efficiently cope with the work. On the other hand, in contrast with ordinary medical treatment, the dental treatment at present available in the district is not of the kind required, for it is practically limited, in children, to extractions of all aching teeth. So harmful, however, is the immediate effect of the septic conditions of the mouths of many children found attending our schools which are attributable to decayed teeth, that the prevention of such conditions as well as their cure justifies the serious consideration of the Education Authority. While the development and preservation of sound teeth are doubtless largely dependent upon the character of the diet during infancy and afterwards, the ill-effects in this direction of unsuitable diet may be to some extent prevented by measures designed to bring about and maintain a clean and wholesome condition of the mouth and teeth by the judicious application of the toothbrush as well as neutralised by the adoption of conservative methods of treatment, such as filling where decay has already commenced. Where such treatment is called for, it is very important that it should be applied early, for by so doing economy of time and material and diminution of suffering are secured.

ADENOIDS AND ENLARGED TONSILS.

These two conditions are appropriately taken together because of the frequency of their association and the similarity of the measures most successfully taken for their treatment. During the year under consideration, 32 children, equivalent to .57 per cent. of those examined, and 277 children, or 4.93 of those examined, were found to be affected by adenoids and enlarged tonsils respectively. Ever since the inauguration in 1909 of routine medical inspection in the district, the records set out an apparent progressive diminution from year to year in the extent of the prevalence of these conditions. It is very probable, however, that a more exhaustive examination with finger or mirror, which is impracticable under the conditions which obtain during the routine examination at the schools, would disclose the existence of many other cases in less pronounced form. The immediately or ultimately disabling character of these diseases, especially adenoids, renders it of great importance that treatment in some satisfactory form should be applied, and where serious symptoms exist operative measures are generally necessary, though not readily obtainable at the present time within the district of the Rhondda Education Authority.

EAR DISEASE AND DEFECTIVE HEARING.

Obvious ear disease occurred in 29, or ·51 per cent., of the children examined, and appreciable deafness in 65, or 1.15 per cent. The deafness is not infrequently due to adenoids, and removal of the latter generally serves to cure the deafness unless some other serious concomitant condition such as disease of the ear itself exists at the same time. Measures such as syringing the ears with appropriate solutions and the practice of thorough cleanliness of the affected parts serve to effect a cure in a proportion of cases, but there are many instances which require further and more difficult steps to remove this disability and source of danger. It is often a matter of some difficulty to convince parents of the gravity of a condition which may appear to be of little moment in a child of four or five years of age, but which is nevertheless capable of developing into a much more disabling if not dangerous form of disease if not dealt with by proper treatment. The milder means of treating this complaint require much persistence and some skill to effect a cure or material improvement, and comparatively few parents in the district can be depended upon to apply them with the necessary regularity and understanding.

EYE DISEASE AND DEFECTIVE VISION.

External disease of the eyes. In this group are included the various forms of inflammation of the eyelids and conjunctivæ, and the total number of children affected amounted to 93, or 1.65 per cent. of the children examined.

Squint. The number of those found to be suffering from some form of squint reached 77, or 1.38 of the total. This defect being frequently dependent upon errors of refraction, the estimation and correction of the latter usually constitute an essential part of the treatment. When it is also remembered that the squinting eye tends to fall into disuse and to become useless in consequence, the importance of early attention is obvious. It is not always sufficient, however, to merely correct the error of refraction, for it is also generally necessary, in order to restore the squinting eye to its normal capacity, to train and educate it to perform its functions.

Defective vision was found to exist in 358, or 6.37 per cent., of the children examined. The proportion thus arrived at is somewhat higher than that relating to the previous year. It is hoped that with the establishment of a school clinic greater promptitude in attending to the defects will be possible, for under existing conditions, when no institution and but few medical men are prepared to deal with these cases, it becomes necessary in most instances for the parents to take their children outside the district for proper treatment, much time and money being thus unavoidably spent.

TUBERCULOSIS IN SCHOOL CHILDREN.

Throughout the whole of the year 1912 only seven cases of tuberculosis in school children were discovered, the percentage proportions being .05 for the pulmonary form and .07 for all other forms (bones being the parts affected in the latter group). This number is a remarkably small one and all the cases were found among the routine groups, none having been discovered among the members of the special group brought to the notice of the medical inspectors. It is probable, however, that some, if not a considerable number, of those showing evidence of other forms of lung disease would on further examination under more favourable conditions require transference to the tuberculosis group. It is hoped that the greater facilities for a more thorough examination which the immediate future is expected to bring will make possible a more definite classification of cases now necessarily pronounced as doubtful.

HEIGHT, WEIGHT, AND CHEST MEASUREMENTS.

Records of the height and weight of a large number of children were taken, the majority being drawn from the entrants and leavers. Chest measurements were taken in the case of boys only. In the following table the average height and weight of the children in the Rhondda Elementary Schools are compared with those given in the report for 1883 of the Anthropometric Committee of the British Association for the Advancement of Science as being the average at that time for the country generally. A comparison between the two groups serves to show, as in the case of previous years, that at practically all ages the average height and weight of both boys and girls in the Rhondda is below the average for the country generally. It is also worthy of observation that, speaking generally, the boys exceed the girls in height and weight up to 7 years, but that the opposite is the case for all the other ages at which a sufficient number of children were examined.

Table 9.

Table giving height, weight, and chest measurement in English and Metric systems of children inspected as compared with the averages for Great Britain in 1883.

Age in Years.	Sex.	Number of Children Inspected.		Heights. (English in inches Metric in Centimetres.)		Weights (English in lbs. Metric in Kilograms.)		Chest Measurements. (Inches and Centimet'es
				Average.		Average.		Average.
				Rhondda.	Great Britain.	Rhondda.	Great Britain.	Rhondda.
3 to 4	Boys	325	English	36·75		32·5		20·6
			Metric	93·0		14·9		52·3
	Girls	349	English	36·5		31·0		
			Metric	92·4		14·7		
4 to 5	Boys	709	English	38·25		35·0		20·9
			Metric	97·3		16·0		53·2
	Girls	645	English	38·0		34·5		
			Metric	96·4		15·7		
5 to 6	Boys	383	English	40·2	41·03	37·5	39·9	21.3
			Metric	101·9	104·25	17·1	18·1	54·0
	Girls	414	English	40·0	40·55	37·0	39·2	
			Metric	101·3	103	16·8	17·8	
6 to 7	Boys	133	English	41·75	44·00	40·5	44·4	21·8
			Metric	105·9	111·75	18·4	20·2	55·2
	Girls	140	English	42·0	42·88	40·0	41·7	
			Metric	106·8	109	18·1	18 9	
7 to 8	Boys	49	English	43·8	45·97	43·0	49·7	22·4
			Metric	111·5	116·76	20·4	22·56	56·7
	Girls	47	English	43·4	44·45	42·0	47·5	
			Metric	109·9	112·90	19·0	21·56	
8 to 9	Boys	8	English	43·25	47·05	43·0	54·9	22·75
			Metric	110·5	119 5	19·8	24·92	57·5
	Girls	15	English	44·75	46·6	44·0	52·1	
			Metric	113·7	118·36	20 9	23·65	
9 to 10	Boys	2	English	47·5	49·7	53·0	60·4	23·75
			Metric	120·5	126·24	23·9	27·42	60
	Girls	1	English	49·7	48·73	57·3	55·5	
			Metric	126·5	123·77	26·2	25·2	
10 to 11	Boys	16	English	51·25	51·84	63·0	67·5	24·75
			Metric	130·4	131·67	28 6	30 64	62 4
	Girls	47	English	51·2	51·05	62·5	62·0	
			Metric	130·8	129·67	28·3	28·15	
11 to 12	Boys	65	English	52·2	53·5	65·3	72·0	25·0
			Metric	132·4	136·	29·3	32 75	63·5
	Girls	168	English	52·75	53·1	66·0	68·1	
			Metric	133·7	135	30·0	30·9	
12 to 13	Boys	734	English	53·8	54·99	72·0	76·7	26·25
			Metric	136·8	139·75	32·4	34·8	66·5
	Girls	536	English	54 2	55·66	68·0	76·4	
			Metric	138·0	141·25	31·1	34·6	
13 to 14	Boys	160	English	54·5	56·91	74·0	82·6	26·5
			Metric	139·3	144·75	33·4	37·5	67·0
	Girls	183	English	55·5	57·77	77·5	87·2	
			Metric	141·2	146·5	35·2	39·5	
14 to 15	Boys	1	English	63·75		101·5		29·5
			Metric	162·5		46·0		75·0
	Girls	10	English	54·5		73·5		
			Metric	139·0		33·3		

6 (e) General Review of the Relation of Home Circumstances and Social and Industrial Conditions to the Health and Physical Condition of the Children Inspected.

There is exceptionally little variety in the character of the population throughout the district, the vast majority being dependent upon coal-mining, which is practically the sole industry of the district. Work is plentiful and good wages are generally earned, so that but little unavoidable poverty is met with. There is, however, much evidence that a large number of the housewives of the district lack the ability or the desire to make the best use of their income, and often show a want of appreciation of the relative,—actual and potential,—values of different foodstuffs. The children suffer more from the want of suitable than from insufficient food, much indiscretion being shown in this direction in the rearing of infants, whose condition in consequence must act prejudicially upon the growth and development of children approaching school age, for many of them have much leeway to make up when their powers become sufficiently vigorous to cope with the unfavourable circumstances under which they are placed at home.

6 (f) REVIEW OF THE METHODS EMPLOYED OR AVAILABLE FOR THE TREATMENT OF DEFECTS.

There has been practically no change in the methods employed or available for the treatment of the defects found in school children, the medical practitioners and the hospitals at Cardiff, Swansea, and elsewhere providing the chief means available.

The National Insurance Act, 1911, has not seriously disturbed the conditions from this point of view, the system of medical contract practice being still generally in vogue in the district as far as the school-going portion of the population is concerned, so that medical attendance is within reach without additional cost of practically all the children in the district, so that seldom can any reasonable excuse be advanced for disregarding the information concerning their children's defects which is supplied to the parents after each inspection. It must, however, be recognised that certain defects require treatment which is obtained with difficulty or is unobtainable without seeking professional assistance outside the area of the Education Authority, and in some instances that course is not practicable owing to the expenditure of time and money which it generally entails. Under the circumstances application has been made to the Board of Education for sanction to assist necessitous cases in obtaining special treatment of this kind to the extent of defraying their travelling expenses and of obtaining the necessary sustenance during the period of absence from home.

School Clinic. No medical treatment of any kind was given during the year by the staff of the Medical Inspection Department, and the provision of treatment in the school clinic it is proposed to establish in 1913 is not provided for in the Committee's scheme. As already stated, the conditions of medical practice in the district places medical treatment within reach of practically all the school children in the area, and it is only when the adequacy of the treatment provided falls short of that required that the necessity for other measures will arise.

The method of "following up." The part services of six whole-time School Nurses were available for the latter half of the year to "follow up" the notices concerning defective children which are sent to the parents of each defective child soon after the medical inspection periodically carried out at each school. The appended table gives a record of the results as ascertained, in most instances, by the School Nurses when visiting the children's homes. Only a portion of the district is embraced by the table, as the prolonged illness of one of the nurses rendered the figures for the remaining one-sixth unobtainable in a form which could be relied upon.

School.	Number of Cases investigated.	Medical Advice Sought.								No Medical advice sought.
		Treated					Not treated owing to			
		Locally.	Elsewhere	Cured or Corrected	Improved	Not Improved	Poverty.	Negligence.	Postponement.	
Blaenrhondda	9	2	...	..	2	...	...	...	4	3
Treherbert ...	6	5	...	...	4	1	..	1	...	..
Dunraven ...	17	11	...	...	10	1	1	1	2	2
Penyrenglyn	9	2	...	1	1	...	2	...	2	3
Ynyswen ...	12	4	1	4	1	...	..	...	4	3
Treorchy ...	22	14	...	5	8	1	3	...	2	3
Parc ...	11	4	1	1	4	...	2	1	3	...
Pentre ...	12	8	...	4	4	...	2	...	2	...
Ton ...	15	7	...	3	3	1	1	...	3	4
Gelli ...	16	8	...	2	6	...	3	...	1	4
Bodringallt ..	14	8	...	...	7	1	2	...	1	3
Williamstown	11	1	2	2	1	...	...	..	3	5
Penygraig ...	13	3	2	...	4	...	1	2	3	2
Dinas ...	6	1	...	1	...	...	2	...	1	2
Graigddu ...	5	1	1	1	...	1	...	...	...	3
Cymmer ...	15	10	2	2	2	8	...	...	1	2
Alaw ...	8	3	1	1	3	...	...	..	4	...
Porth ..	26	11	6	3	9	5	3	1	4	1
Llwyncelyn ...	10	6	2	3	4	1	1	1	...	...
Islwyn ...	4	...	...	...	...	...	3	...	...	1
Wattstown ..	7	2	..	1	1	...	2	...	1	2
Ynyshir ..	2	1	1	1	1	...	...	...	...	...
Pontygwaith	9	3	2	...	4	1	...	...	2	2
Stanleytown	3	1	1	1	1	...	...	...	1	...
Tylorstown ...	18	7	...	...	7	...	1	...	7	3
Ferndale ...	14	6	2	4	2	2	...	...	1	5
Dyffryn ...	14	6	1	2	3	2	1	...	3	3
Blaenllechau	1	1	...	...	1	...	...	...	...	...
Maerdy ...	19	6	...	2	4	..	...	...	7	6
Totals ...	328	142	25	45	97	25	30	7	62	62

It will be seen from the table that 167, or 51 per cent., of the total number of defective children were seen by their doctors and treated, and that of these 45 were reported as cured and the remainder were under treatment at the time of the most recent inquiry. Ninety-nine, or 30 per cent., had been seen by their medical attendants, but had not been treated owing to the causes stated. In 30 cases, or 9 per cent., poverty was stated to be the reason. In all the cases included in the last group the treatment recommended by the doctor involved either a journey to Cardiff or elsewhere for the advice of a specialist, or the purchase of some article, such as spectacles, beyond the means of the parents. In some of the cases the poverty is doubtless of a temporary character and due to recent strikes.

In 7 cases, or 2 per cent., the failure to follow the advice of the medical man was attributed to indifference on the part of the parents, and in 62 cases, or 19 per cent., there was a postponement of treatment, either by the doctor's advice, or to suit the convenience or pockets of the parents in cases where treatment involving a journey was recommended.

In 62 cases, or 19 per cent., no medical advice had been sought. Although in a number of these cases a promise was made to the School Nurses that medical advice will forthwith be obtained, warning notices have been sent to the nurses in respect of each of the children in this group to be delivered to the parents in the event of its being found on the next visit that no steps will then have been taken by those responsible. It may be added that in the large majority of cases the School Nurses were well received, and in many instances a repetition of the visits secured adequate treatment for the defects.

Method of exclusion from school. The scheme of exclusion and re-admission is as yet incomplete, and its completion will be impracticable until a school clinic will be available for the re-examination of excluded children prior to their re-entry to school.

6 (g) INFECTIOUS DISEASE IN THE SCHOOLS.

The notifiable infectious diseases are discovered during routine medical inspection with comparative infrequency, but during epidemics of measles, chicken pox, and whooping-cough the detection of one or other of these diseases has to be sometimes recorded. In the case of the notifiable infectious diseases all children from the infected houses are prevented from attending school by the Health Department until after the disinfection of the premises following the removal or recovery of the notified case or cases.

In the course of the year it was considered advisable to close the Infants' Departments of Gelli and Pentre Schools for 4 and 5 weeks respectively, and to exclude the second and third divisions of Class II. at Bodringallt for a fortnight.

6 (h) DEFECTIVE CHILDREN.

No definite action has as yet been taken in the direction of providing, by special means, suitable instruction for children who on account of defects, mental or physical, are unable to profit by the ordinary course of instruction given in the Elementary Schools. Education Authorities are naturally hesitating to take decided action in dealing with children who are mentally deficient until the fate of the Mental Deficiency Bill introduced for the consideration of Parliament in 1913 will be decided. The inspections carried out at the schools do not serve to disclose the existence of many cases of mental defectives attending the schools. If the Royal Commission which reported in 1908 be followed, it may be estimated that there are 260 children in the schools who are feeble-minded or imbecile, and that 195 of these require special educational provision.

6 i. (1) THE METHODS AND RESULTS OF INSTRUCTION IN PERSONAL HYGIENE AND TEMPERANCE.

The plan adopted in some previous years of engaging a special lecturer on temperance, the lectures being given twice a year in each department, has been discontinued, and the instruction now given on Temperance and Hygiene is limited to the lessons taught by the teachers at the various schools, a Temperance and Hygiene Reader being provided.

INFANT CARE AND MANAGEMENT. This subject forms part of the course of instruction given to elder girls in the Housecraft School established at Pentre by the Local Education Authority. Each course covers a period of 10 weeks, the pupils being drawn from the elder girls of 12 or 13 years of age attending 5 schools in the neighbourhood. The Head Teacher, Miss Helen Norris, is provided with one assistant, and 36 girls are taken during each course. The number of courses each year is four and the total number of girls thus taught amount to 144 during each school year. The subjects taught include housewifery, cookery, laundry work, and the care and management of babies, a model representing a baby being used for purposes of demonstration and practice. Each lesson is followed or accompanied by the practical application of the principles conveyed, and each girl receives much individual attention from the staff. Each pupil is held responsible for her share of the duties and there is practically no duty which each pupil does not perform under the supervision and with the guidance of a member of the staff. The girls are said to be receptive and much interested, and it is believed that the knowledge acquired at the school will be to a considerable extent retained until the urgent need for it will arrive when the pupils undertake responsibilities of their own. It is, however, hoped that the serious gap between the cessation of attendance at school at about the age of 13 and the assumption by the pupils of the duties of married life and motherhood can, to some extent at least, be bridged by means of Evening Continuation Schools or some other appropriate means.

The accommodation at the school consists of two model flats, each comprising a kitchen, sitting-room, bedroom, and pantry, together with a large room for teaching purposes. There is also provided room for laundry work, including washing, drying, and ironing.

6 i. (2) THE METHODS AND RESULTS OF PHYSICAL OR BREATHING EXERCISES IN THE SCHOOLS.

There appears to be no alteration in the methods of carrying out these exercises, as compared with previous years. It is, however, a matter for regret that some difficulty is experienced in creating some interest in the subject amongst the teachers, the applicants from among them for permission to attend the classes of instruction during the summer vacation at various centres being relatively few.

6 i (3) OPEN-AIR SCHOOLS.

No open-air schools have been established in the Rhondda Urban District.

6 (j) MISCELLANEOUS WORK IN CONNECTION WITH THE SCHOOLS.

During the year, 11 male and 18 female candidates for pupil teacherships were medically examined. Many of them were accepted only provisionally upon certain removable defects from which they were found to be suffering being attended to before they commenced to teach. In these instances the pupils were re-examined at a later date for the purpose of securing compliance with this condition.